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PROCEEDINGS

OF THE

SOCIETY OF ANTIQUARIES OF SCOTLAND.

SESSIONS

MDCCCLXIV-LXV.—MDCCCLXV-LXVI.



VOL. VI.

EDINBURGH:

PRINTED FOR THE SOCIETY BY NEILL AND COMPANY.

MDCCCLXVIII.

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*At a Council Meeting of the Society of Antiquaries of Scotland,
held on the 23d of November 1866,*

It was reported, that, in terms of former Resolutions, the Sixth Volume of the PROCEEDINGS OF THE SOCIETY was in progress, under the joint superintendence of Mr DAVID LAING and Dr JOHN ALEXANDER SMITH ; and that the First Part will be ready in a few days for circulation among the Members. It is understood by the COUNCIL that the Authors are alone responsible for the various statements and opinions contained in their respective Communications.

The COUNCIL, in consequence of the delay experienced in printing the Proceedings, resolved :—" That in future all Communications read before the Society, and intended for publication, shall be left, ready for press, with one of the Secretaries, within eight days after the Meeting."

JOHN STUART,
JOHN ALEX. SMITH, } Secretaries.

OFFICE-BEARERS, 1865-66.

PATRON.

HER MAJESTY THE QUEEN.

President.

HIS GRACE THE DUKE OF BUCCLEUCH AND QUEENSBERRY, K.G.

Vice-Presidents.

THE HON. LORD NEAVES.

PROFESSOR JAMES Y. SIMPSON, M.D.

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Councillors.

FRANCIS ABBOTT, Esq.

GEORGE PATTON, Esq., Advocate, } *representing the Board of Trustees.*

ADAM SIM, Esq., of Coulter Mains.

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JOSEPH ROBERTSON, Esq., LL.D.

Colonel JOSEPH DUNDAS of Carronhall.

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JOHN STUART, Esq., General Register House.

JOHN ALEXANDER SMITH, M.D.

DAVID LAING, Esq., LL.D., *Foreign Correspondence.*

Treasurer.

THOMAS B. JOHNSTON, Esq.

Curators of the Museum.

JAMES DRUMMOND, Esq., R.S.A.

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Curator of Coins.

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Librarian.

JOHN HILL BURTON, Esq., LL.D.

Keeper of the Museum.

MR WILLIAM T. M'CULLOCH.

Assistant Keeper of the Museum.

ROBERT PAUL.

LIST OF THE FELLOWS
OF THE
SOCIETY OF ANTIQUARIES OF SCOTLAND.

NOVEMBER 30, 1866.

~~~~~  
PATRON.  
HER MAJESTY QUEEN VICTORIA.  
~~~~~

1853. ABBOTT, FRANCIS, Moray Place,—*Curator*.
1853. *ABERDEIN, FRANCIS, Montrose.
1858. ADAM, ROBERT, City Accountant, Council Chambers.
1864. ADAMSON, JOHN, Newburgh, Fife.
1828. *AINSLIE, PHILIP BARRINGTON, The Mount, Guildford, Surrey.
1864. ALEXANDER, Colonel Sir JAMES EDWARD, Knight, of Westerton, Bridge
of Allan.
1846. ALEXANDER, Rev. WILLIAM LINDSAY, D.D., Brown Square.
1860. ALLMAN, GEORGE J., M.D., Professor of Natural History, University,
Edinburgh.
1865. ANDERSON, ARTHUR, M.D., Deputy-Inspector of Hospitals.
1864. ANDERSON, ARCHIBALD, Advocate.
1865. ANDERSON, THOMAS S., Lindores Abbey, Fifeshire.
1863. APPLETON, JOHN REED, Westerton Hill, Durham.
1859. ARBUTHNOT, GEORGE C., Loanhead.
1850. ARGYLE, His Grace The Duke of, K.T.
1856. ARKLEY, PATRICK, Advocate, 29 Great King Street.

An asterisk (*) denotes Members who have compounded for their Annual Contributions.

1861. AUCHIE, ALEXANDER, Clydesdale Bank.
1865. AUFRECHT, THEODORE, M.A., Professor of Sanscrit in the University of Edinburgh.
1866. AULD, JAMES, LL.D., Madras College, St Andrews.
1861. BAIKIE, ROBERT, M.D., 49 Northumberland Street.
1838. BALFOUR, DAVID, of Balfour and Trenaby, Orkney.
1862. BALFOUR, JOHN M., W.S.
1847. BALLANTINE, JAMES, 42 George Street.
1857. BARCLAY, Lieut.-Colonel PETER, H.E.I.C.S., Coates Crescent.
1866. BARNWELL, Rev. EDWARD LOWRY, M.A., Melksham, Wilts.
1862. BARRIE, WILLIAM, High School, Dalkeith.
1863. BECK, Rev. JAMES, A.M., Rector of Parham, Sussex.
1854. BEGBIE, JAMES WARBURTON, M.D., F.R.C.P.E.
1861. BERRY, WALTER, Danish Consul-General, 16 Carlton Terrace.
1861. BINNING, Right Honourable GEORGE LORD.
1852. BLACK, DAVID D., of Kergord, Brechin.
1847. BLACKIE, WALTER G., Ph.D., Publisher, Glasgow.
1865. BRAIKENRIDGE, Rev. GEORGE WEARE, Clevedon, Somerset.
1866. BREMNER, BRUCE A., M.D., Morningside.
1863. BREMNER, DAVID, Wick.
1857. BRODIE, THOMAS, W.S., Alva Street.
1849. *BROWN, A. J. DENNISTON, Balloch Castle, Dumbarton.
1865. BROWN, WILLIAM, F.R.C.S.E., Dublin Street.
1841. BROWN, WILLIAM HENRY, of Ashley, Ratho.
1863. BRUCE, HENRY, Kinleith, Currie.
1861. BRUCE, WILLIAM, M.D., R.N., Burntisland.
1849. BRYCE, DAVID, Architect, R.S.A., 131 George Street.
1853. BRYSON, ALEXANDER, Princes Street.
1845. *BUCCLEUCH AND QUEENSBERRY, His Grace The Duke of, K.G.,—*President of the Society.*
1847. BUCHAN, Rev. CHARLES F., D.D., Fordoun Manse.
1857. BUIST, ANDREW WALKER, of Berryhills, Fifeshire.
1863. BURNETT, GEORGE, Lyon King at Arms.
1860. BURNETT, Sir JAMES HORN, of Leys, Bart.
1858. BURTON, JOHN HILL, LL.D., Advocate, Craig House, Morningside.

1847. CAMPBELL, Sir ALEXANDER, of Barcaldine, Bart.
 1852. *CAMPBELL, ALEXANDER, of Monzie.
 1865. CAMPBELL, Rev. JAMES, Balmerino, Fifeshire.
 1850. CAMPBELL, Rev. JOHN A., Legh, Helpston, Northampton.
 1862. CARFRAE, ROBERT, 77 George Street,—*Curator of Museum*.
 1861. CARLYLE, JOHN AITKEN, M.D.
 1864. CATTO, JOHN, Merchant, Aberdeen.
 1865. *CHALMERS, JAMES, Granton Lodge, Aberdeen.
 1859. CHALMERS, JAMES HAY, Advocate, Aberdeen.
 1855. CHALMERS, JOHN INGLIS, of Aldbar, Forfarshire.
 1844. CHALMERS, Rev. PETER, D.D., Abbey Church, Dunfermline.
 1844. *CHAMBERS, ROBERT, LL.D., St Andrews.
 1836. CHEYNE, HENRY, W.S., 6 Royal Terrace.
 1853. CHRISTISON, ROBERT, M.D., F.R.C.P.E., Professor of Materia Medica,
 University, Edinburgh.
 1853. COLLIER, WILLIAM F., LL.D., Saxe-Coburg Place.
 1861. CONSTABLE, THOMAS, 34 Royal Terrace.
 1862. COOK, JOHN, W.S., Great King Street.
 1851. *COULTHART, JOHN ROSS, of Coulthart and Collyn, Ashton-under-Lyne.
 1849. *COWAN, CHARLES, of Valleyfield, West Register Street.
 1849. COWAN, DAVID, 7 York Place.
 1865. COWAN, JAMES, West Register Street.
 1850. COX, ROBERT, W.S., 25 Rutland Street.
 1826. CRAIG, JAMES T. GIBSON, 24 York Place.
 1861. CRAWFURD, THOMAS MACKNIGHT, of Cartsburn.
 1861. CRICHTON, MICHAEL II., North Bridge.
 1865. CUNINGHAME, GEORGE CORSANE, Melville Street.
 1866. CURROB, DAVID, of West Craigduckie, S.S.C.
1853. DALHOUSIE, Right Hon. the Earl of, K.T.
 1857. DALRYMPLE, CHARLES E., Kinellar, Aberdeenshire.
 1865. DAWSON, ADAM, younger of Bonnytown, Linlithgow.
 1862. DICKSON, DAVID, George Square.
 1844. DICKSON, WILLIAM, Accountant, 22 George Street.
 1861. DOUGLAS, DAVID, 88 Princes Street.
 1856. DOUGLAS, JAMES, of Cavers, Hawick.

1851. *DRUMMOND, GEORGE HOME, younger of Blair-Drummond.
1828. *DRUMMOND, HENRY HOME, of Blair-Drummond.
1848. DRUMMOND, JAMES, R.S.A., 30 Hamilton Place,—*Curator of Museum.*
1859. DRUMMOND, WILLIAM, Rockdale, Stirling.
1849. DRYSDALE, WILLIAM, Assistant-Clerk of Session, 3 Hart Street.
1850. *DUNCAN, JAMES MATTHEWS, M.D., F.R.C.P.E., 30 Charlotte Square.
1848. DUNCAN, WILLIAM J., Manager of the National Bank of Scotland.
1827. DUNDAS, SIR DAVID, of Dunira, Bart.
1850. DUNDAS, WILLIAM PITT, Advocate, Registrar-General for Scotland.
1864. DUNDAS, Colonel JOSEPH, of Carron Hall, Falkirk.
1862. DUNRAVEN AND MONTEARLE, Right Hon. The Earl of, Adare, Ireland.
1863. EDMONSTONE, SIR ARCHIBALD, Bart. of Duntreath, Stirlingshire.
1853. FLCHO, Right Hon. Lord, M.P., Amisfield, Haddingtonshire.
1862. ELLIOT, WALTER, of Wolfelee, Roxburghshire.
1855. EUING, WILLIAM, Glasgow.
1841. *EYTON, JOSEPH WALTER KING, London.
1858. FARQUHARSON, FRANCIS, of Finzean, 5 Eton Terrace.
1866. *FARQUHARSON, ROBERT, of Haughton, Aberdeenshire.
1848. FERGUSON, WALTER, Teacher of Drawing, 36 George Street.
1863. *FLOCKHART, HENRY, Inverleith Row.
1862. FORBES, WILLIAM, of Medwyn, 17 Ainslie Place.
1848. *FOTHERINGHAM, WILLIAM H., Sheriff-Clerk of Orkney, Kirkwall.
1865. *FRANKS, AUGUSTUS W., M.A., British Museum, London.
1862. FRASER, ALEXANDER, 13 East Claremont Street.
1857. *FRASER, PATRICK ALLAN, of Hospital Field, Arbroath.
1864. FRASER, PATRICK, Advocate.
1851. FRASER, WILLIAM, S.S.C., Assistant-Keeper of Register of Sasines.
1864. FREER, ALLAN, Banker, Melrose.
1863. FRIER, ROBERT, Artist, India Street.
1865. GIBB, ANDREW, Lithographer, Aberdeen.
1862. GILLMAN, ANDREW, S.S.C., London.
1846. GOODSIR, ALEXANDER, 18 Regent Terrace.
1840. GOODSIR, JOHN, Professor of Anatomy, University, Edinburgh.

1860. GORDON, Rev. COSMO R., A.M., Manchester.
 1860. *GORDON, EDWARD S., Advocate, 2 Randolph Crescent.
 1852. GRAHAME, BARRON, of Morpie, St Andrews.
 1851. GRAHAM, WILLIAM, LL.D., 1 Moray Place.
 1866. *GREENSHIELDS, JOHN B., Advocate, younger of Kerse, Lanarkshire.
 1863. GRIGOR, JOHN, M.D., Nairn.
 1835. *GROAT, ALEX. G., of Newhall, 12 Hart Street.

 1846. *HAILSTONE, EDWARD, of Horton Hall, Bradford.
 1833. HAMILTON, ALEXANDER, LL.B., W.S., The Elms, Morningside.
 1850. HAMILTON, JOHN, W.S., 81 George Street.
 1861. *HAMILTON, Right Hon. R. C. NISBET, of Dirleton.
 1860. HANNAH, Rev. JOHN, D.C.L., Glenalmond, Perthshire.
 1849. HARVEY, GEORGE, President Royal Scottish Academy, 21 Regent Terrace.
 1859. HAY, Major WILLIAM E., H.E.I.C.S., Loanhead.
 1864. HAY, ROBERT J. A., of Nunraw, Prestonkirk.
 1856. HEBDEN, ROBERT J., of Eday, Orkney.
 1862. HENDERSON, WILLIAM H., Writer, Linlithgow.
 1862. HODSON, Rev. JAMES S., D.D., Great King Street.
 1860. HOME, DAVID MILNE, of Milnegraden and Paxton.
 1852. *HORN, ROBERT, Advocate, 7 Randolph Crescent.
 1865. HORSBRUGH, JAMES, of Lochmalony, Cupar.
 1861. *HOWE, ALEXANDER, W.S., 22 Charlotte Square.
 1826. HUIE, RICHARD, M.D., F.R.C.S.E., 8 George Square.
 1860. HUTCHISON, ROBERT, of Carlowrie.

 1853. INNES, COSMO, Advocate, Professor of History, University, Edinburgh.
 1866. IRVINE, JAMES T., Architect, London.
 1862. *IRVING, GEORGE VERE, of Newton, Lanarkshire.

 1849. JACKSON, ALEXANDER, M.D., India Street.
 1851. *JACKSON, EDWARD JAMES, B.A. Oxon., 6 Coates Crescent.
 1859. JAMIESON, GEORGE A., Accountant, St Andrew Square.
 1865. JARDINE, Sir WILLIAM, Bart., LL.D., of Applegarth, Lockerbie.
 1859. JEFFREY, ALEXANDER, Solicitor, Jedburgh.
 1848. JOHNSTON, Rev. GEORGE, D.D., 6 Minto Street.

1849. JOHNSTON, THOMAS B., 4 St Andrew Square,—*Treasurer*.
 1848. JOHNSTONE, WILLIAM B., R.S.A., Curator of the National Gallery.
 1864. JONES, MORRIS CHARLES, Gungrog, near Welshpool.
1865. KAYE, ROBERT, Fountain Bank, St Patrick's Hill, Glasgow.
 1848. KERR, ANDREW, Architect, Office of H.M. Works.
 1861. KING, Major WILLIAM ROSS, of Tertowie, Kinellar, Aberdeenshire.
1856. LAING, ALEXANDER, Newburgh, Fife.
 1824. LAING, DAVID, LL.D., Signet Library,—*Vice-President and Foreign Secretary*.
 1864. *LAING, SAMUEL, M.P., London.
1866. LAIDLEY, J. M., Seacliff, North Berwick.
 1838. LAURIE, WILLIAM A., W.S., Rossend Castle, Burntisland.
 1862. LAWRIE, ARCHIBALD CAMPBELL, Advocate, Nelson Street.
 1862. LAWSON, CHARLES, Sen., of Borthwick Hall, George Square.
 1847. LAWSON, CHARLES, Jun., of Borthwick Hall.
 1865. LEE, EDWARD, St George's Road, London.
 1863. LEE, Rev. FREDERICK GEORGE, S.C.L. Oxon., London.
 1856. LEISHMAN, Rev. MATTHEW, D.D., Manse, Govan.
 1857. LESLIE, CHARLES STEPHEN, younger of Balquhain.
 1861. LESLIE, Colonel J. FORBES, of Rothie, Aberdeenshire.
 1855. *LINDSAY, The Right Hon. Lord, Haigh Hall, Lancashire.
 1866. LINDSAY, JOHN, Woodend, Almond Bank, Perth.
 1849. LOCHORE, Rev. ALEXANDER, Manse, Drymen, Stirlingshire.
 1831. *LOGAN, ALEXANDER, London.
1858. LOGAN, GEORGE, W.S., Clerk of Teinds.
 1860. LOTHIAN, The Most Honourable the Marquess of, Newbattle Abbey.
 1866. *LOVAT, Right Hon. The Lord, Beaufort Castle, Inverness-shire.
 1865. LYELL, DAVID, Writer, Walker Street.
1856. M'BURNEY, ISAIAH, LL.D., Athole Academy, Isle of Man.
 1853. MACDONALD, JOHN, Town-Clerk, Arbroath.
 1862. MACGIBBON, DAVID, Architect, George Street.
 1849. MACGREGOR, ALEXANDER BENNET, younger of Kernoch, Glasgow.
 1856. MACGREGOR, DONALD R., Leith.

1852. MACKENZIE, ALEXANDER KINCAID, Manager, Commercial Bank of Scotland.
1846. MACKENZIE, DONALD, Advocate, 12 Great Stuart Street.
1844. MACKENZIE, JOHN WHITEFOORD, W.S., 16 Royal Circus.
1844. *MACKENZIE, KEITH STEWART, of Seaforth, Brahan Castle, Dingwall.
1841. MACKNIGHT, JAMES, W.S., 12 London Street.
1864. *MACKINTOSH, CHARLES FRASER, of Drummond, Inverness-shire.
1865. MACKISON, WILLIAM, Architect, Stirling.
1864. M'LAREN, DUNCAN, M.P., Newington House.
1856. M'LAUCHLAN, Rev. THOMAS, LL.D., St Columba Free Church, Edinburgh.
1841. MACLAURIN, HENRY C., General Post-Office.
1861. MACLEOD, WILLIAM, M.D., Ben Rhydding, Yorkshire.
1846. MACMILLAN, JOHN, M.A., Emeritus Master and Examiner of High School of Edinburgh, *Librarian*.
1855. MACNAB, JOHN, Publisher, Stead's Place, Leith Walk.
1844. M'NEILL, ARCHIBALD, P.C.S., 73 Great King Street.
1849. *MARSHALL, GEORGE H., Heriot Row.
1861. MARWICK, JAMES DAVID, City-Clerk, City Chambers.
1858. MATHESON, Sir JAMES, of the Lewes and Achany, Bart., M.P.
1864. MELDRUM, GEORGE, C.A., York Place.
1853. MERCER, GRAEME R., of Gorthy.
1862. MERCER, Major WILLIAM DRUMMOND, Hunting Tower, Perth.
1862. MERCER, ROBERT, of Scotsbank, Ramsay Lodge, Portobello.
1860. *MILLER, JOHN, of Leithen, Peeblesshire.
1851. MILLER, SAMUEL CHRISTY, of Craigentinny, St James's Place, London.
1859. MILN, JAMES, of Murie, Perthshire.
1866. MITCHELL, HOUSTON, Trinity Lodge.
1851. MONTEITH, ROBERT I. J., of Carstairs, Lanarkshire.
1851. *MONTGOMERY, Sir GRAHAM G., of Stanhope, Bart., M.P.
1857. MORISON, ALEXANDER, of Bognie, Aberdeenshire.
1856. MOSSMAN, ADAM, Jeweller, Princes Street.
1860. MUDIE, JOHN, of Pitmuies, Arbroath.
1862. MUIR, WILLIAM, Wellington Place, Leith.
1853. *MURRAY, THOMAS GRAHAM, W.S., 4 Glenfinlas Street.
1863. MYLNE, ROBERT WILLIAM, Architect, Whitehall Place, London.

1838. NASMYTH, ROBERT, F.R.C.S.E., Surgeon-Dentist, Charlotte Square.
 1857. NEAVES, the Hon. Lord, Charlotte Square,—*Vice-President*.
 1864. NEILSON, JOHN, W.S., Windsor Street.
 1860. NEISH, JAMES, of the Laws, near Dundee.
 1857. *NICHOL, JAMES DYCE, of Ballogie, M.P., Aberdeenshire.
 1836. *NICHOLSON, ALEXANDER, Cheltenham.
 1861. *NICOL, ERSKINE, R.S.A., London.
 1851. NIVEN, JOHN, M.D., 110 Lauriston Place.
1832. *OMOND, Rev. JOHN REID, Monzie, Crieff.
1861. PAGAN, WILLIAM, of Clayton, Fifeshire.
 1857. PATERSON, GEORGE, of Castle Huntly, Perthshire.
 1862. PATERSON, GEORGE A., M.D., Charlotte Square.
 1858. PATERSON, ROBERT, M.D., Leith.
 1859. PATON, JOHN, Meadow Place.
 1846. PATON, JOSEPH NEIL, Dunfermline.
 1859. PATON, JOSEPH NOEL, R.S.A., 33 George Square.
 1859. PATTON, GEORGE, Right Hon. The Lord Advocate, Heriot Row.
 1862. PEDDIE, JOHN DICK, Architect, 5 South Charlotte Street.
 1855. *PENDER, JOHN, Manchester.
 1860. PIERSON, JAMES ALEX., of The Guynd, Forfarshire.
 1860. PRIMROSE, Hon. BOUVERIE F., 22 Moray Place.
1865. RAINY, Professor ROBERT, D.D., Free Church College, Roseberry Crescent.
1864. *RAMSAY, Captain JOHN, of Straloch and Barra, Aberdeenshire.
 1860. REID, JAMES, Secretary, Commercial Bank of Scotland.
 1866. REID, WILLIAM, W.S., Frederick Street.
 1849. RHIND, DAVID, Architect, 54 Great King Street.
 1861. ROBERTSON, ANDREW, M.D., Indego, Tarland, Aberdeenshire.
 1849. *ROBERTSON, DAVID H., M.D., Leith.
 1856. ROBERTSON, GEORGE B., W.S., General Register-House.
 1859. ROBERTSON, Colonel JAMES A., 118 Princes Street.
 1862. ROBERTSON, JOHN, S.S.C., Portobello.
 1854. ROBERTSON, JOSEPH, LL.D., General Register-House.

1863. ROBIN, Rev. JOHN, Manse, Burntisland.
1861. ROBINOW, ADOLPH, Hanseatic Vice-Consul, Moray Place.
1865. ROBINSON, JOHN RYLEY, Dewsbury.
1854. RODGER, JAMES C., London.
1864. SCOTT, Rev. HEW, Anstruther-Wester, Fifeshire.
1841. SCOTT, JOHN, of Rodono, W.S.
1848. SETON, GEORGE, Advocate, St Bennet's, Greenhill.
1864. SHAND, ROBERT, Teacher, Perth.
1849. SHIEL, WILLIAM, Assistant Clerk of Session, General Register-House.
1861. SIM, ADAM, of Coulter Mains, Lanarkshire.
1860. SIM, GEORGE, 40 Charlotte Square,—*Curator of Coins*.
1865. SIM, WILLIAM, of Lunan Bank, Walker Street.
1864. SIMPSON, Rev. ADAM L., Derby.
1849. SIMPSON, Sir JAMES Y., Bart., M.D., D.C.L., F.R.C.P.E., Professor of Midwifery, University, Queen Street,—*Vice-President*.
1864. SIMSON, GEORGE W., Artist, Frederick Street.
1857. SINCLAIR, ALEXANDER, 133 George Street.
1833. SKENE, WILLIAM FORBES, LL.D., W.S., Inverleith Row.
1853. SMALL, ANDREW, 29 East Claremont Street.
1844. *SMITH, DAVID, W.S., 64 Princes Street.
1822. SMITH, JAMES, of Jordanhill.
1847. SMITH, JOHN ALEX., M.D., F.R.C.P.E., 7 West Maitland Street,—*Secretary*.
1858. SMITH, ROBERT M., Bellevue Crescent.
1866. SMYTHE, WILLIAM, of Methven, Perthshire.
1855. SNODY, ANDREW, S.S.C., Gayfield Square.
1864. SOUTAR, WILLIAM SHAW, Banker, Blairgowrie.
1858. STARKE, JAMES, Advocate, Traquair-holme, Dumfries.
1855. STEVENSON, THOMAS, Civil Engineer, 17 Heriot Row.
1847. STEVENSON, Rev. WILLIAM, D.D., Professor of Church History, University.
1863. STEWART, JAMES R., 4 Duke Street.
1854. STEWART, JOHN, of Nateby Hall.
1850. STRUTHERS, Rev. JOHN, Minister of Prestonpans.
1853. STUART, JOHN, General Register-House,—*Secretary*.

1845. *STUART, Hon. Sir JOHN, Vice-Chancellor of the Court of Chancery in England.
 1851. SWINTON, ARCHIBALD CAMPBELL, of Kimmerghame, Advocate.
 1856. *SYME, JAMES G., Advocate.
1860. TAYLOR, JAMES, Merchant, Leith.
 1859. THOMSON, ALEXANDER, of Banchory, Aberdeenshire.
 1847. THOMSON, THOMAS, W.S., 1 Thistle Court.
 1866. TILL, WALTER J., Manor House, Croydon, Surrey.
 1862. TREVELYAN, Sir WALTER C., of Wallington, Bart., Northumberland.
 1865. TROUP, WILLIAM, College Library, St Andrews.
 1865. TURNER, WILLIAM, M.B., University.
 1866. TWEDDELL, GEORGE M., Stokesley, Yorkshire.
1862. *VEITCH, GEORGE SETON, Bank of Scotland.
 1860. VERE, WILLIAM E. HOPE, of Craigie Hall.
1859. *WALKER, FOUNTAINE, of Foyers, Inverness-shire.
 1848. WALKER, WILLIAM, F.R.C.S.E., 47 Northumberland Street.
 1861. WALKER, WILLIAM STUART, of Bowland.
 1849. WARE, TITUS HIBBERT, Hale Barns, Altringham, Cheshire.
 1850. WAY, ALBERT, of Wonham Manor, Reigate, Surrey.
 1861. WEBB, P. ROBERT, Buckingham Terrace.
 1856. WEBSTER, JOHN, Advocate, Aberdeen.
 1866. WHYTE, ALEXANDER, Accountant, South Queensferry.
 1860. WILSON, WILLIAM THORBURN, Rutherglen.
 1861. *WILSON, WILLIAM, Banknock, Stirlingshire.
 1852. WISE, THOMAS A., M.D., Rostillan Castle, Ireland.
 1863. WISHART, EDWARD, Hermitage House, Trinity.
 1864. WRONGHAM, WILLIAM, Agent, Dundee.
1866. YOUNG, ROBERT, Writer, Elgin.
 1849. YULE, General PATRICK, Royal Engineers, London.

LIST OF HONORARY MEMBERS
OF THE
SOCIETY OF ANTIQUARIES OF SCOTLAND,
DECEMBER 1865.

[According to the *Law*s, the Number is limited to TWENTY-FIVE.]

1820.

PRINCE GUSTAFF VASA OF SWEDEN.

1845.

JOHN LINDSAY, Esq., Barrister-at-Law, Cork.

1849.

Right Hon. Sir WILLIAM GIBSON CRAIG of Riccarton, Bart., Lord Clerk
Register.

GEORGE PETRIE, LL.D., Vice-President of the Royal Irish Academy, Dublin.

5 Sir CHARLES GEORGE YOUNG, Garter-King-at-Arms, F.S.A.

1851.

Right Hon. The EARL STANHOPE, D.C.L., President of the Society of Anti-
quaries, London.

1853.

DANIEL WILSON, LL.D., Professor of English Literature, Toronto, Canada.

1855.

Colonel Sir HENRY C. RAWLINSON, K.C.B., D.C.L., London.

1857.

WILLIAM REEVES, D.D., Lusk, Dublin.

1860.

10 His Majesty The KING OF SWEDEN AND NORWAY.

Right Hon. LORD TALBOT DE MALAHIDE.

Dr RICHARD LEPSIUS, Berlin.

The Chevalier G. H. PERTZ, LL.D., Royal Library, Berlin.

1861.

JAMES FARRER, Esq., Ingleborough, Yorkshire.

1862.

15 His Royal Highness ALBERT EDWARD, PRINCE OF WALES.

Dr FERDINAND KELLER, Zurich.

The PRINCE LOUIS LUCIEN BONAPARTE.

1864.

Right Hon. Sir JOHN ROMILLY, Master of the Rolls.

THOMAS DUFFUS HARDY, Esq., Deputy-Keeper of Her Majesty's Public
Records, London.

20 ALEXANDER J. BERESFORD HOPE, Esq., LL.D., M.P., London.

M. ALEXANDRE TEULET, of the Imperial Archives, Paris.

JAMES HENTHORN TODD, D.D., Trinity College, Dublin.

1865.

The Most Hon. MARQUESS CAMDEN, K.G.

Sir HENRY DRYDEN, Bart., Canons Ashby, Northamptonshire.

25 BENJAMIN THORPE, Esq., Cheswick, near London.

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5. Contributed by the Rev. E. L. Barnwell.

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1. Views furnished by Colonel Dundas.

2. Plate contributed by David Laing, Esq.

3, 4. Contributed by Messrs Nelson & Co., Publishers.

5. Drawn on the Stone by the Rev. J. M. Joass.

PROCEEDINGS

OF THE

SOCIETY OF ANTIQUARIES OF SCOTLAND.

~~~~~  
EIGHTY-FIFTH SESSION, 1864-65.  
~~~~~

ANNIVERSARY MEETING, 30th November 1864.

JOSEPH ROBERTSON, Esq., LL.D., Vice-President, in the Chair.

The Office-bearers of the Society were elected for the Session as follows :—

Patron.

HER MAJESTY THE QUEEN.

President.

THE DUKE OF BUCCLEUCH AND QUEENSBERRY, K.G.

Vice-Presidents.

JOSEPH ROBERTSON, Esq., LL.D.

Hon. Lord NEAVES, LL.D.

Professor JAMES Y. SIMPSON, M.D.

Councillors.

GEORGE PATTON, Esq. } *Representing the*

FRANCIS ABBOTT, Esq. } *Board of Trustees.*

Professor WILLIAM STEVENSON, D.D.

WILLIAM FORBES of Medwyn, Esq.

ADAM SIM of Coulter, Esq.
 REV. THOMAS M'LAUCHLAN, LL.D.
 JAMES T. GIBSON CRAIG, Esq.
 PROFESSOR COSMO INNES.
 JAMES D. MARWICK, Esq.

Secretaries.

JOHN STUART, Esq., General Register House.
 JOHN ALEXANDER SMITH, M.D.
 DAVID LAING, Esq., LL.D., } *For Foreign*
 JOHN M. MITCHELL, Esq., } *Correspondence.*

Treasurer.

THOMAS B. JOHNSTON, Esq., 4 St Andrew Square.

Curators of the Museum.

JAMES DRUMMOND, Esq., R.S.A.
 ROBERT MERCER of Scotsbank, Esq.

Curator of Coins.

GEORGE SIM, Esq.

Librarian.

JOHN HILL BURTON, Esq., LL.D.

Auditors.

WILLIAM F. SKENE, Esq.
 ALEXANDER BRYSON, Esq.

WILLIAM T. M'CULLOCH, *Keeper of the Museum.*
 ROBERT PAUL, *Assistant.*

The following gentlemen, upon the unanimous recommendation of the Council, were balloted for, and duly elected to fill the vacancies in the list of the HONORARY MEMBERS OF THE SOCIETY :—

Right Hon. Sir JOHN ROMILLY, Master of the Rolls in England.
 THOMAS DUFFUS HARDY, Esq., Deputy Keeper of the Public Records
 of England.
 ALEXANDER J. BERESFORD HOPE, Esq., M.P.
 M. ALEXANDRE TEULET, of the Imperial Archives, Paris.
 Rev. JAMES HENTHORN TODD, D.D., Professor of Hebrew, and Librarian,
 Trinity College, Dublin.

An ordinary ballot then took place, and the following gentlemen were
 elected FELLOWS OF THE SOCIETY :—

JOHN ADAMSON, Esq., Newburgh, Fife.
 ARCHIBALD ANDERSON, Esq., Advocate.
 JOSEPH DUNDAS of Carron Hall, Esq., Falkirk.
 ROBERT J. A. HAY of Nunraw, Esq., Prestonkirk.
 MORRIS CHARLES JONES, Esq., Solicitor, Liverpool.
 SAMUEL LAING, Esq., London.
 Rev. HEW SCOTT, Minister of Anstruther Wester.
 ROBERT SHAND, Esq., Perth.
 GEORGE W. SIMSON, Esq., Artist.
 WILLIAM S. SOUTAR, Esq., Banker, Blairgowrie.

Also, as CORRESPONDING MEMBERS :—

ROBERT DICKSON, Esq., L.R.C.S.E., Carnoustie.
 M. LOUIS PROSPER GAUCHARD, Keeper of the Belgian Archives.
 M. J. B. GERGERÉS, Keeper of the Library of Bordeaux.
 Professor PETER LORIMER, D.D., London.
 THOMAS WATTS, Esq., British Museum, London.

In the notices of HONORARY MEMBERS deceased, usually given in the
 proceedings of the anniversary meeting, Mr LAING, Foreign Secretary,
 stated, that mention should have been made of Monsieur J. F. ARTAUD,
 Director of the Museum of Antiquities at Lyons. He was elected an
 Honorary Member so long since as 9th December 1814; and his name
 had been continued on the Society's List for several years after his
 decease.

M. FRANÇOIS ARTAUD was a native of Avignon, and born in the year
 1767. Having early distinguished himself as an archæologist, he was
 elected a Corresponding Member of the Academy of Sciences in the

Institute of France, after his appointment as Director of the large and important Museum at Lyons. Much of his time was devoted to the preparation of a work on Ceramic Art. His "*Mosaïques de Lyon et du Midi de la France*," twelve numbers, in large folio, appeared between 1818 and 1827. But he did not live to complete either this or another work, entitled "*Voyage Archéologique et Pittoresque de l'Aube et dans l'ancien Diocèse de Troyes*." Royal 4to. It was commenced in 1837, and was carried on to the thirty-sixth number. Monsieur Artaud died at Orange, in the department of Vaucluse, in the year 1838.

It has not been the practice (Mr Laing observed) to notice in the minutes the decease of Corresponding Members, partly owing to the difficulty of tracing the history of individuals residing in distant localities; but it is right that special exceptions, more especially of learned foreigners, should be brought under the notice of the Society.

Of three learned Norwegians admitted on the 30th of November 1849, one was Professor P. A. MUNCH, then resident in Edinburgh; another was CHRISTIAN LANGE, Keeper of Norwegian Archives at Christiania, who died in 1861. A third was Professor RUDOLF KEYSER, of the University of Christiania, who died in October last. He was the joint editor with Munch of an important collection of the old Laws of Norway, entitled "*Norge Gamle Love indtil 1387; af det Kongelige Norske Videnskabers selskab udgivne ved R. Keyser og P. A. Munch*." 3 vols. roy. 4to. Christiania, 1846-1849.

The cause of Archæology among our Northern brethren (Mr Laing added) has, within these few weeks, sustained another loss in the person of Councillor CARL CHRISTIAN RAEN, so well known in this country as the active and indefatigable Secretary of the Royal Society of Northern Antiquaries at Copenhagen. Mr J. M. MITCHELL, Joint Foreign Secretary (who is prevented by illness from attending this meeting), has requested me to intimate that he purposes submitting to the Society a detailed account of this learned Dane, which he is well qualified to do from personal acquaintance.—[Before the close of the present session, Mr Mitchell himself has died; and therefore we may add, that Professor Raen was born in the island of Funen, in Denmark, 11th January 1795. He was for several years employed in the University Library of Copenhagen,

where he received his education. He was elected a Corresponding Member of our Society on the 28th of February 1831. He died at Copenhagen on the 20th October 1864. His widow has transmitted to his friends in this country a tribute to his memory, being "Notices of the Life and Writings of Councillor Carl Christian Rafn," &c. By Professor L. E. Brøning. Copenhagen, 1864, royal 8vo.]

The Chairman stated that the following Members of the Society had died during the past year, viz.—

Honorary Member.

	Elected
JAMES SKENE of Rubislaw, Esq.,	1844

[Mr Skene was elected a Fellow of the Society in May 1818.]

Fellows.

The Right Honourable JAMES BRUCE EARL OF ELGIN AND KINCARDINE, K.G. (formerly PRESIDENT OF THE SOCIETY), .	1841
ADAM GIB ELLIS, Esq., W.S.,	1829
SIR JOHN WATSON GORDON, Knt., R.A., President of the Royal Scottish Academy,	1851
ALEXANDER M'LEAN, Esq., Haremere Hall, Sussex,	1862
HUGH PATON, Esq., Carver and Gilder to the Queen, Edinburgh,	1846
Rev. WALTER SCOTT, Minister of Whittingham,	1854
Rev. JOHN SIME, Edinburgh,	1848
The Right Honourable NORTH-HAMILTON DALRYMPLE EARL OF STAIR,	1856
Major-General THOMAS SWINBURNE of Marcus,	1850
JOSEPH YOUNG of Duneard, Esq.,	1862

The SECRETARY, Mr STUART, then read the following statement relative to the Museum and Library :—

NUMBER OF VISITORS TO THE MUSEUM FROM 1ST DECEMBER 1863 TO
31ST OCTOBER 1864:—

	Week Day.	Sat. Evening.	Total.
1863. December, . .	6,447	628	7,075
1864. January, . .	16,393	651	17,044
... February, . .	3,495	456	3,951
... March, . . .	4,278	335	4,613
... April, . . .	3,739	373	4,112
... May, . . .	4,952	578	5,530
... June, . . .	5,746	711	6,457
... July, . . .	9,588	1,586	11,174
... August, . .	15,941	1,748	17,689
... September, .	7,966	1,181	9,147
... October, . .	5,650	803	6,453
... November,*
* (Shut for Cleaning).	84,195	9,050	93,245

The corresponding numbers for the year ending 31st October 1863 were—Day, 82,248; Saturday evenings, 9118; total, 91,366; being 1879 less than the number of visitors during the year just ended.

The donations to the Museum and Library were 212 articles of antiquity, 187 coins and medals, 71 volumes of books and pamphlets. Three articles of antiquity were purchased, and also 13 volumes of books, &c.

The donations to the Museum and Library for the year ending 31st October 1863 were 301 articles of antiquity, 140 coins and medals, and 104 volumes of books.

(The various donations here referred to have been specially described in the Proceedings.)

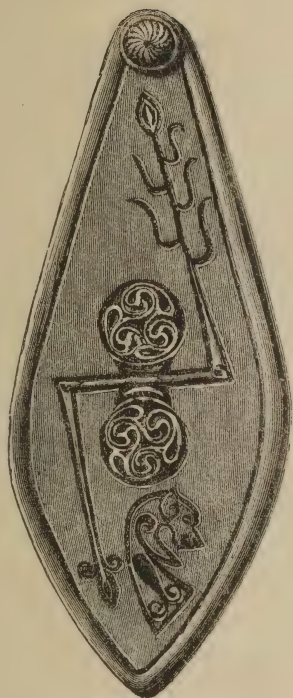


Fig. 1.—Full size.

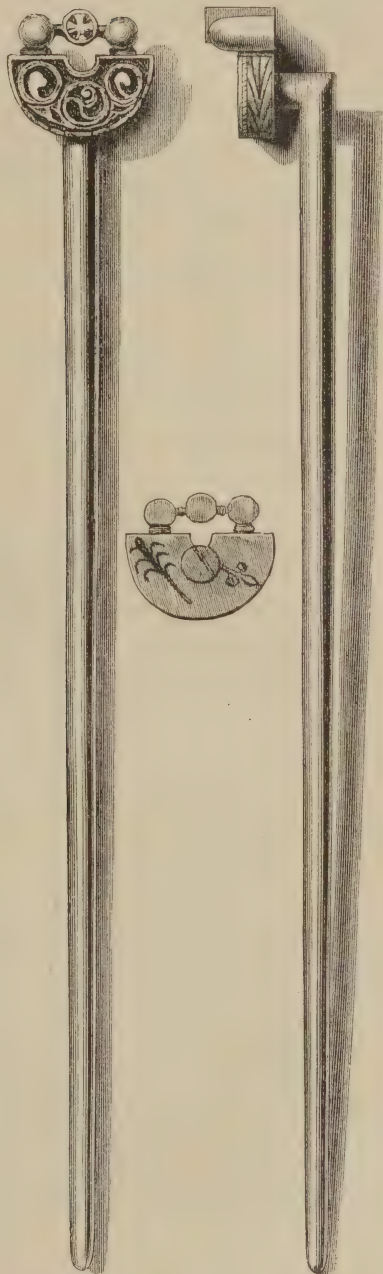


Fig. 2.—Full size.

MONDAY, 12th December 1864.

JOSEPH ROBERTSON, Esq., LL.D., Vice-President, in the Chair.

The following Gentlemen were balloted for and elected Fellows of the Society :—

SIR WILLIAM JARDINE, Bart., of Applegarth, Dumfriesshire.

ADAM DAWSON, Esq., younger of Bonnytown, Linlithgow.

EDWARD LEE, Esq., 4 Marlborough Terrace, Penge and Thame, Oxon.

The Donations to the Museum and Library were as follows; and thanks were voted to the Donors :—

(1.) By Mrs DUNDAS DURHAM, of Largo.

Collection of Silver Ornaments found about the year 1817 in the tumulus of Norrie's Law, near Largo, Fifeshire. (Plates I. and II.)

These articles were exhibited in the Museum formed by the Archæological Institute of Great Britain and Ireland during the meeting held in Edinburgh July 1856, and are thus described in the published Catalogue of that collection, drawn up by Albert Way, Esq., F.S.A. Scot. :—

“ The Silver ornaments, rings, hooks, fragments of plate, chains, &c., consisting of 153 objects and fragments, being the collection of relics rescued by the late General Durham from the large deposit discovered about 1817 in a tumulus, known as Norrie's Law, on the estate of Largo. The precise facts connected with this remarkable discovery were never ascertained, owing to the apprehensions of the interference of the Scottish Exchequer to reclaim the ‘treasure trove.’ Such particulars as could be collected are stated in the report by Dr George Buist of Cupar, on ‘The Silver Armour of Norrie's Law,’ and in the notices in the ‘Archæological Journal,’ vol. vi. p. 248, and in Dr Wilson's ‘Pre-historic Annals,’ pp. 511, 519. The chief relics of this remarkable hoard have also been figured in Mr Chalmers's ‘Sculptured Monuments of Angus,’ plate 23, and Mr Stuart's ‘Sculptured Stones of Scotland,’ plate 133. The date to which these ornaments should be assigned is very uncertain. Dr Wilson is disposed to regard them as Scottish of ‘The Christian Period,’ and to limit their age to the period between the

third and sixth century. The accompanying woodcuts show the more remarkable objects. Plate I. fig. 1 (original size)—one of a pair of leaf-shaped plates of unknown use; the boss at the upper extremity is merely hammered up, and supplies apparently the means by which the plate might be attached to any other object. This plate is chiefly remarkable, however, as bearing two of the peculiar symbols occurring on early sculptured monuments in Scotland, as shown in the late Mr Patrick Chalmers's work on 'The Monuments of Angus,' and Mr Stuart's 'Sculptured Stones of Scotland.' Fig. 2 (original size), a bodkin, probably for fastening the dress, or for the hair. A pair of these was preserved. The head originally, as it is believed, enriched with enamel, is of a peculiar fashion, of frequent occurrence on objects of this class found in Ireland. Fig. 3 (half-size), the penannular portion of a brooch, the acus lost. A brooch of silver, closely resembling this, was found in Cumberland, and is figured in Pennant's 'Scotland,' vol. ii. p. 44. Fig. 4 (half-size), a plate of unknown use, with scroll ornaments in high relief of admirable workmanship. Fig. 5 (half-size), a disk, measuring 3 inches in diameter; at the upper edge there are two holes, possibly for attaching the plate to the dress. [These holes appear to have been probably caused by the plate having been bent and broken at the place, rather than made for suspension.] A smaller disk, like a button, formed with a cavity, as if intended to be set with a gem, has no such perforations. Fig. 6 (original size), a spiral ring, the edges serrated at regular intervals. Among the other relics preserved from the crucible may be mentioned a stout double hook, in form of an S; a narrow riband of silver plate, length upwards of a yard in its present state, breadth about half an inch, one end tapering to a point; a fragment of a fine interlaced chain; two fragments of armlets; a portion of a small pin or bodkin of the same form as those before described. Also numerous fragments of thin plate, possibly the remains of the coating of a shield or of a corslet, such as that of gold found in Wales, and now in the British Museum; on some marginal portions appear a border of oblong bosses, rudely hammered up, possibly to represent nail heads. The entire weight of the relics is about 24 oz."

Three small portions of a silver band or plate selected from among the scraps of silver, and weighing altogether 76 grains, show an engraved



Fig. 3.—6½ inches in greatest diameter.

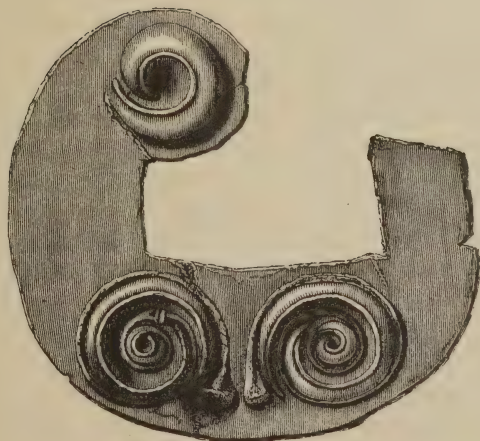


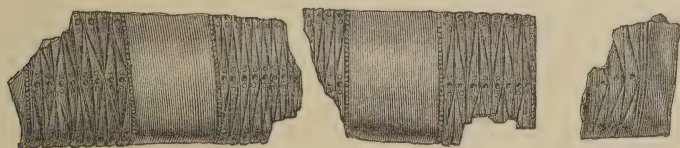
Fig. 4.—5 inches in greatest diameter.

SILVER FIBULA AND ORNAMENTS FOUND AT NORRIE LAW, FIFESHIRE.

(At page 8, omit the references to Nos. 5 and 6, intended for this plate.)

ornamental pattern. These are figured of the full size in the annexed woodcut.

The discovery of these singular relics was made about three miles from the coast, on the estate of Largo, the property of the donor, at no great distance from the town of Largo, on the northern shore of the Firth of Forth. The precise facts connected with the discovery have not been ascertained with certainty; even the date of their being found is uncertain; but it appears to have been either in the year 1817 or 1819. Nor was it till twenty years after the discovery that they came under the notice of Mr Buist of Cupar, who drew up and published in



Portions of an Engraved Silver Plate (original size).

1839 a report upon the subject, which has been included in a communication describing the discovery to the Archæological Institute, by Robert Dundas of Arniston, Esq., and from it the following particulars have been gathered:—

“The relics were found in or near a stone coffin, in an artificial heap or tumulus of sand or gravel, called Norrie’s Law, on the boundaries betwixt the estates of Teasses and Largo. They [were supposed to have] formed part of a rich coat of scale armour, the pieces of which consisted of small-sized, lozenge-shaped plates of silver, suspended loosely by a hook from the upper corner. The helmet and shield and sword-hilt were, when found, quite entire, as were some portions of the sword-sheath. This seems to have been a large cross-hilted weapon, such as were commonly used with both hands. No part or relics of the blade were discernable; no ashes, bones, or human remains, appear to have been found near. The pieces of armour were withdrawn piecemeal, and sold by a hawker for what they would bring, and to whomsoever chose to purchase them. A considerable number of coins, now wholly lost sight of, and said to have symbolic markings, were found along with the armour of Norrie’s Law, and about forty, [stated to have

been] of the same kind, were found in an earthen pot, at Pittenweem, in 1822. A considerable part of the armour was partially corroded, the alloy having been eaten away, as if by some weak acid, exactly after the manner of that employed in certain operations of modern silversmiths. These are nearly all the facts obtained respecting the Norrie's Law find, for which Mr Buist was indebted to Mr R. Robertson, jeweller, Cupar, who first made a purchase of five pounds' worth, subsequently two of ten pounds, and knew of another made by some one in Edinburgh to the amount of about twenty pounds; and is under the belief that perhaps as much as that may have been carried away, and bestowed on various uses. This, by rough computation, may, together with what remains, be reckoned not much under four hundred ounces of pure bullion. Mr Robertson had a peculiarly distinct recollection of the forms of the various portions of the armour procured by him, and gave a description of the rich carving of the shield, the helmet, and the sword handle, which were brought to him crushed in pieces, to permit convenient transport and concealment."

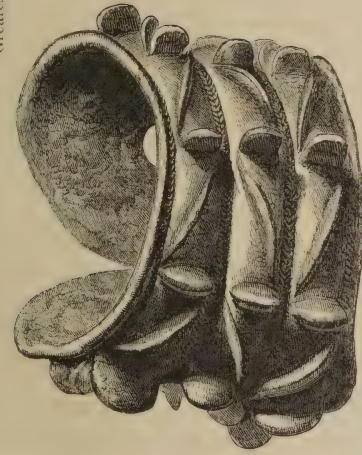
"The collection (now presented to the Museum) consists of the portion of this remarkable discovery which came into the possession of the late General Durham, being those pieces which were left or neglected by the finder; they were picked up by the brother-in-law of the tenant and another person, both now deceased, who brought them to the General. A bodkin and one of the scale-like plates were rescued from the crucible in consequence of subsequent inquiry, and were added to the others at Largo House."

"It may deserve mention, although doubt has been expressed as to the existence of such tradition previously to the discovery being made at Largo, that, as we have been assured, an obscure belief had existed amongst the neighbouring peasantry, that in "Norrie's Law" had been deposited a warrior and his steed, placed in an erect position. He was, according to this popular relation, the chief of a great army, and his armour was of massive silver; in the whole host, he alone was armed in that manner."

Close by the "Law" are the "Standing Stones of Lundin." Three only now exist. They measure, the highest, 16 ft.; the smallest 14½ ft.¹

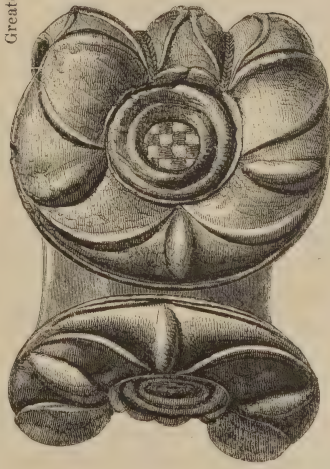
¹ Archaeological Journal, vol. vi. p. 248. 1849.

Greatest diameter, $6\frac{1}{2}$ inches.



1.

Greatest diameter, $5\frac{1}{4}$ inches.



2.

Fig. 1.—Bronze Armlet found on the Farm of Maine, Auchinbadie, Parish of Alvah, Banffshire.
Fig. 2.—Bronze Armlet (with Enamels) found at Castle Newe, Strathdee, Aberdeenshire.

Half of the Upper Portion of a Sepulchral Urn of reddish clay. It has a pattern of straight and vandyke lines, apparently done with a twisted cord, or more probably stamped with a small toothed or comb-like tool. It measures $8\frac{1}{2}$ inches in diameter across the mouth, and was found among charred wood, in digging at no great depth from the surface, towards the west side of the tumulus, at Norrie's Law, Largo, in Fife.

(2.) By Mrs MORISON of Bognie, Banffshire.

Portion of a Sepulchral Urn of yellowish clay, measuring $8\frac{1}{2}$ inches across the mouth. The upper part is ornamented with a belt of alternate vandyke patterns, each half of the lozenge or vandyke being covered with lines drawn parallel to one of the sides of the vandyke. The urn was found in a stone coffin in a small hill near Mountblairry. Other stone coffins have been found in the same hill, but they did not contain urns. It is now imperfect.

Stone Ball of Greenstone, 3 inches in diameter, with its surface deeply cut into six circular discs or facets, which are plain, or without ornament. It was found at Montblairry, Banffshire, and is similar in character to a ball found in digging a drain several feet under ground, on the Glass Hill or Gray Hill, parish of Towie, Aberdeenshire, described and figured in the Proceedings of the Society, vol. iii. p. 439.

Large Bronze Armlet, measuring, in its longest diameter $6\frac{1}{2}$ inches, and $5\frac{3}{8}$ inches in its greatest depth, and weighing $3\frac{3}{4}$ lb. It is ornamented with three parallel rounded mouldings or belts, which are thickly studded with alternately transverse, and oblique projections. There are two oval apertures in front, measuring each $1\frac{1}{4}$ inches in length. It was found some years since on the farm of Maine of Auchenbadie, on the estate of Mountblairry, parish of Alvah, Banffshire. The farmer was trench-ploughing the field, which had long been in cultivation, and the plough brought up the armlet from a depth of 12 or 14 inches. In an adjoining field there is an artificial mound in which some relics were found, but nothing of great interest. The armlet is figured in the accompanying Plate (III.) fig. 2.

(3.) By the Honourable Captain OGILVY of Loyal, Alyth, Perthshire.

Bowl-shaped Sepulchral Urn, measuring $4\frac{1}{2}$ inches in height, and 6 inches in diameter across the mouth, including the thick and broad lip.

It is covered or ornamented with small lines of herring-bone pattern; two grooves run round the upper part of the urn, the lower of which has small projections left at irregular distances; and the ridges between the grooves are each ornamented with a row of small holes or punctures. The urn was found in a cist on the farm of Mill of Queich, parish of Alyth, and is somewhat similar in character to one found in a cist at Murleywell, Forfarshire, described and figured in the Proceedings of the Society, vol. v. p. 81.

Rude Cup of green-coloured stone, measuring $4\frac{1}{2}$ inches in diameter across the mouth, by 3 inches in height, with a small rounded handle projecting from one side of the mouth; the handle is pierced by a perforation, probably for suspension.

The cup was found at Barryhill, in the parish of Alyth, Perthshire, and is similar in type to one found near the circle of standing stones at Crookmore, in the parish of Tullynessle, Aberdeenshire, presented in the year 1852, by Mr John Stuart, Secretary to the Society, and figured in the Proceedings, vol. i. p. 117.

(4.) By Colonel K. ERSKINE of Pittodrie, Aberdeenshire.

Large Cinerary Urn, measuring 12 inches in diameter across the mouth, with an ornamented belt of vandyke pattern round the upper part, similar in character to the urn found at Mill of Queich, described above. Two round stone balls, each 3 inches in diameter, found along with the urn.

(5.) By PETER O. OGILVY of Ruthven, Esq.

Flattened Bronze Ring, now covered with patina. It is 2 inches in diameter, and was found among a quantity of ashes, charcoal, &c., near a "Pict's house" at Ruthven, Perthshire.

(6.) By D. H. ROBERTSON, M.D., F.S.A. Scot.

Tirling Pin, with shields (the precursor of the knocker), from the door of a house in Queen Street, Leith (now demolished), one of the supposed residences of Queen Mary of Lorraine in 1560.

(7.) By JAMES M'LEAVY, Esq., Glasgow.

Thistle Dollar of King James VI. 1581, found in a field at Cambuslang, Lanarkshire. This coin is figured in Mr Lindsay's work upon the "Coinage of Scotland," plate 10, No. 206, and is marked as to rarity No. 8, which is the highest degree given in his work.

(8.) By the IRISH ARCHÆOLOGICAL AND CELTIC SOCIETY.

The Martyrology of Donegal; a Calendar of the Saints of Ireland. Translated from the original Irish by the late John O'Donovan; edited by J. H. Todd, D.D., and William Reeves, D.D. 8vo. Dublin, 1864.

(9.) By the SOCIETY.

Transactions of the Dumfries and Galloway Natural History and Antiquarian Society, session 1863-64. 8vo. Edin. 1864.

(10.) By the SOCIETY.

Transactions of the Historic Society of Lancashire and Cheshire. New Series, vol. iii. Session 1862-63. 8vo. Liverpool 1863.

(11.) By J. B. DAVIS, M.D., the author.

Ancient British Coins. 8vo. (pp. 8.) Lond. 1864.

There was exhibited—

A Bronze Armlet, one of a pair of a similar description; found several years ago in digging at Castle Newe, Strathdon, Aberdeenshire. By Mr Alexander Walker, gardener, Castle Newe, Strathdon, Aberdeenshire. This armlet varies somewhat in pattern from the bronze armlet described above, the projections being less marked and the workmanship generally finer in detail. The two oval spaces or openings in front, are filled up with separate oval pieces of metal, which are ornamented with patterns in red and yellow coloured enamel. These oval portions have been fixed to the armlet by iron pins. It measures $5\frac{3}{4}$ inches in its greatest diameter, and $4\frac{1}{2}$ inches in depth, and weighs $3\frac{3}{4}$ lb. It is carefully figured in Plate III. fig. 2.

The pair of armlets were found together, embedded in the earth over the mouth or entrance to an "Eirde or Pict's House," in the garden at Castle Newe. The place, at the time when the armlets were found, was not known to be the site of a "Pict's House," but last year its existence was discovered from the great amount of fire-burnt pavement, with ashes, and parts of querns, antique beads, &c., which were come upon at a depth of two feet below the surface soil. On a search being made, the whole house was discovered: it was tolerably entire in outline; but unfortunately the garden wall had been built, several years before, running along its whole length, which extends to about fifty feet. The remains of the walls of the house were $4\frac{1}{2}$ feet in height, and built

curving inwards towards each other; the breadth of the paved floor was 7 feet. Altogether the house bore a great resemblance to the "Eirde House" found at Buchaam, in the immediate neighbourhood, already described in the Proceedings of the Society. (See Proceedings, vol. iv. p. 436, and Plate XIV.)

A Denarius of the Emperor Nerva has been recently found close by the place where the pair of armlets were discovered.

The following Communications were read:—

I.

AN ACCOUNT OF THE EXCAVATIONS AT CAMBUSKENNETH ABBEY
IN MAY 1864. BY COLONEL SIR JAMES E. ALEXANDER, K.C.L.S.,
F.S.A. SCOT., &C. (PLATE IV.)

The Abbey of Cambuskenneth, founded in 1147 by David I. of Scotland, stood on a peninsula of the river Forth, and little more than a mile in a direct line from the town of Stirling. A ferry requires to be crossed to reach the remains of the venerable pile.

So complete has been the destruction of the Church of St Mary of Cambuskenneth by the disciples of John Knox in 1559, that its site was now found to be quite covered with greensward, where cows grazed. A white-washed cottage and some old elms were on the south side, and behind them the walls of an extensive orchard. On the east was the winding river. In the centre of the field appeared a mound slightly raised, and on it some thorn bushes: here, it was conjectured, stood the high altar, for west of it was a broken arch, forming now the entrance to a small enclosed cemetery in which are the tombstones of a few of the people of the district. This arch, pointed, enriched with deeply cut mouldings, the capitals of broken shafts and trellis carving, was evidently the principal or western door of the church. The width is six feet between the jambs.

Near the arch, but quite detached from the church, there yet stands the campanile or belfry tower, a remarkable object in the landscape. It is square, thirty-seven feet each face, substantially built of hewn stone; is seventy feet in height, strengthened with Anglo-Norman pilaster but-



Note. The four degrees of shade show the different periods of building; the lightest being the oldest.
The letters a, b, &c. refer to the next Plate.

RUINS OF
CAMBUSKENNETH ABBEY STIRLING

Scale
0 10 20 30 40 50 60 70 80 feet

tresses, and provided with pointed Gothic windows, some of them built up. A handsome blank arcade of six pointed arches and slender shafts faces the town; above this, and projecting from the battlements, are the remains of a stone figure, now decapitated. "The oldest inhabitant," a fisherman, James Mathie, said he remembered when the head fell to the ground, and the name the figure went by was "Maggie Teuch" (tough?). It was evidently a gargoyle or waterspout. The rows of corbels under the parapet seemed to have been ornamented with rude masks.

On the north-west angle of the tower is an elegant octagonal turret, containing a stair which conducts to the top of the building. The turret is capped and provided with gablettes, like those seen on the Glasgow cathedral, of the same date. The low and flat arch of the entrance is surmounted by a triangular projection. On the apex is a *fleur de lis*. A canopied niche is over the door, on opening which a well-preserved groined roof is observed. In the centre of the roof is a large circular aperture, up which the bells were passed. The square openings for ringing the bells are at the sides of the groined roof, and the marks of the ropes are still upon them.

The view from the top of the tower is extensive and varied. "Grey Stirling," with its castellated rock, the favourite residence of many of the Scottish kings; the fields of Bannockburn, Sauchieburn, and Falkirk; the Abbey Craig, beneath which the heroic Wallace fought for the liberties of his country the battle of Stirling; the grand solemn Ochil range; the majestic Grampians, and the sinuous course of the noble Forth, afford a rich treat to the admirers of one of the richest scenes in Scottish landscape. Now also an additional interest arises from being able to trace from the parapet of the abbey tower the foundations of the cruciform edifice beneath.

The Wallace monument on the summit of the Abbey Craig, when completed with its lantern or diadem top, keeper's house, and courtyard, will reflect great credit on the architect, Mr Rothead.

To the north-east, and near the river's bank, are the remains of a building with lofty ruined walls, called the "Dovecot" or pigeon-house, and where probably was the *Hospicium* for the reception and entertainment of strangers.

After the accession of James VI. to the English throne, the tempo-

ralities of Cambuskenneth were bestowed on John, Earl of Mar, by whom the barony of the abbey was conferred on his brother, Alexander Erskine of Alva, and in whose family it remained till 1709, when it was purchased by the Town Council of Stirling for the benefit of Cowan's Hospital. It is highly desirable, then, that means be taken by the trustees of the Hospital to repair and point what yet remains of the ancient edifice, to cut out the trees which are destroying the belfry tower, and remove the unseemly stones and bricks which block up some of the pointed windows ; to clear the foundations inside and outside, and repair the floors of the different stories.¹

In the Chartulary of the Abbey the orchards are particularly referred to, and appear to have been bequeathed to the monastery by several of the monks ; and one garden is termed "Paradise." The orchards still remain on two sides of the abbey, and have been long celebrated for their delicious pears, apples, and "geans."

The Chartulary of Cambuskenneth, substantially bound and embellished with various illuminations, and provided also with a great seal, is in the possession of the Advocates Library, Edinburgh. It was transcribed on vellum in the year 1535, at the instance of the Abbot, Alexander Myln, from original documents which were decaying from the damp situation of the Abbey. Water appears on its site at the depth of four or five feet.

Due west from the abbey was the original ferry : it is now some distance higher up the Forth. In carrying off the large bell, it was said a mysterious figure appeared at the stern of the boat, which suddenly upset, and the bell has ever since remained in the bed of the river. It could be easily dredged for during the summer months. Its recovery would be highly interesting. In an old print of the abbey a chapel appears near the ferry, and provided with a Norman arch, whilst the other arches that now appear are the Anglo-Norman of the twelfth century.

In visiting lately the valuable collection of Scottish antiquities at Dunfermline, collected by Mr Paton, father of the eminent painters of that name, I saw, among clocks from the palaces of Linlithgow, Falkland, and Stirling, beautifully carved and inlaid cabinets from the same,

¹ This is now being executed under the intelligent direction of Mr W. Mackison, C.E., F.S.A. Scot., 1865.

antique chairs, original paintings, &c. (all which should be catalogued and minutely described), there was the alms-box of the monastery of Cambuskenneth, found some years ago among the ruins. It is a square box of iron with Gothic ornaments, and is well preserved. Keys were found near it. I have in my possession a singular stone, said to be from Cambuskenneth. It was for some years at Alloa, then at Menstrie House, probably when possessed by the Alexanders, Barons of Menstrie. I obtained it after much negotiation from an old woman of the name of Moir, whose husband had built it into the front of his cottage at Menstrie. It is a foot square, and from the ingeniously entwined letters on its face the word "Cambuskenneth" can be made out.

It was conjectured by Mrs Coulson of Timsbury Hall, Bath (who carefully copied the stone), that the letters are an imitation, not of an entire brass monogram, but of letters cut in brass and fastened to a cross of hide, of which the centre is supported by a square of wood below, to form a further relief for the deeply square cut letters.

It will be remembered that the unfortunate James III. of Scotland married an amiable and beautiful Danish princess, Margaret of Oldenburg, by whom were the Duke of Rothesay, afterwards James IV., and the Princes Alexander and John. After the revolt of the nobles, Queen Margaret sickened and died, and was buried before the high altar at Cambuskenneth. King James, after his fatal flight from Sauchieburn, his fall from his noble grey charger presented to him by Lord Lindsay of the Byres—which, alarmed at the noise made by a pitcher dropped from the hand of a frightened woman, swerved, and threw the king heavily—and after his cruel assassination by a pretended priest at Milton or Beaton's Mill, was also buried next his queen, and with due ceremony, at Cambuskenneth. "Anè sweete youth," a royal prince, was also buried there, according to the M'Farlane manuscript in the Advocates' Library. Yet another remarkable royal personage, no other than Richard II. of England, is believed by many to have found a final resting-place at Cambuskenneth, and that after his deposition he was not murdered by steel or poison at Pontefract Castle, but made his escape from it, wandered to the Hebrides, where he was entertained by Macdonald, Lord of the Isles; from thence he was transferred to Stirling Castle, in which he resided eighteen years, and was buried at the Abbey.

The accomplished author, James Grant, says in one of his works:—“Now none may say where James III. of Scotland and the Isles, or his queen, Margaret of Oldenburg, are lying, for the noble Abbey of St Mary has been swept from its foundations (a great part of the stones were used by an Earl of Mar to construct the strange ‘wark’ at the head of the Broad Street of Stirling); one remnant alone survives, a lofty tower, and though the country people still pretend to remember the royal grave, and point it out to visitors, not a stone remains to mark the tomb of the murdered monarch, for the place is now a bare greensward.”

The author of a *Journey through Scotland* in 1723 says he saw the grave of King James III. under a hawthorn tree at Cambuskenneth.¹

It had been suggested to the Trustees of Cowan’s Hospital that it would be desirable to ascertain where the body of James III. lay, and his Queen, so as to treat the royal remains with proper respect, and enclose the tombs, also to trace out the extent of the Abbey Church and explore generally among the foundations. The magistrates of Stirling, entering into this design, and the sanction of the Crown having also been secured, on the 2d May 1864, twelve workmen were placed under the charge of Bailie Ranken, treasurer of the Town Council of Stirling, a gentleman of good taste and ability, who had for years been most usefully employed in superintending public works in and about Stirling.

The following gentlemen were on the ground at the Abbey at the beginning of the excavations:—Provost Murie, Bailies Monteath and Yellowlees; Treasurer Ranken; Councillors Davidson and Christie; Rev. Dr Beith, Rev. Paul Maclauchlan; Dr Duncanson, Alloa; Mr Wallace, Alloa; Colonels Nugent, Boldero, and Sir J. E. Alexander; and Mr Rothead, architect. Among those from Edinburgh were Mr Matheson, of H.M. Board of Works; and, as representing the Society of Antiquaries, Mr David Laing, Mr John M. Mitchell, Belgian Consul, and Mr Andrew Kerr.

The excavators were divided into two parties, and what is singular,

¹ Mr David Laing mentioned to me that the late Mr Adam G. Ellis, W.S., told him an old inhabitant at the Abbey had pointed out, many years ago, the mound near such a tree, under which the King was buried. Mr Ellis, who imagined he might still recognise the spot, had long expressed a desire that the place should be explored; but at this time he was altogether unable to accompany the deputation from Edinburgh.

though there was not a stone of the church and the adjacent buildings to be seen when the work commenced, but merely undulations on the surface of the ground, owing to some judicious directions, the men had not dug more than half-an-hour before one of the parties came upon the site of the high altar—a square enclosure of masonry—and the other on the transepts.

In the earth, above which had stood the high altar, was found the body of a youth lying across the enclosure, the head in a recess. Beneath this, and longitudinally, lay a fine skeleton of a yellowish colour, probably that of an ecclesiastic. The bones were carefully put aside for re-interment, and I had them photographed by Mr Crowe of Stirling. (These photographs were exhibited to the meeting.)

The church and chapter-house, with the base of a central pier to support an arched roof, were now traced out; the scalloped capital of the pier or pillar was found. The bases of some of the piers of the church were in good order, and the clayey soil had so well preserved the foundation stones that they appeared sharply cut as if recently laid.

The length of the church, from the high altar inclusive to the western door, was ascertained to be 178 feet, breadth 37 feet.

On the south are the foundations of a long building, near one of the orchards. This may possibly have been the Parliament House. At Cambuskenneth, in 1326, the nobility, barons, and clergy assembled in solemn Parliament along with a great number of persons of inferior rank, and swore fealty to David Bruce as heir apparent to the throne. "This," says Tytler, "was the first Scottish Parliament, as far as can be ascertained, into which the representatives of cities and burghs were admitted as members." Here various of the Scottish monarchs granted charters and the Scottish Parliament repeatedly assembled.

In the course of the excavations, coins of the Jameses and Charleses were found; three keys—one large enough to have been the key of the west door; knives, razors, pieces of pottery (Dutch, probably)—one piece with a curious dog's head on it; tobacco pipes (similar to some I had seen at the Bass Rock, supposed to have been used by the soldiers of the guard there); portions of stained glass from the eastern window; broken stone shafts and capitals of pillars of the twelfth century; a brass shoe-buckle; a brass chess-knight (the horse's head well defined); stone

whorls for the distaff; a small glass bottle; a curious iron instrument, 14 inches long, of unknown use, with prongs, though certainly not a fork. (Sketches of these various articles were exhibited.) It will interest the curious in these matters, when all the *reliquiæ* are laid out for inspection in a chamber of the belfry tower.

At one of the angles of the chapter-house, in which the *sedilia* or bench tables are well preserved, is the figure of a mediæval sword. This is in a strange position, as if the stone on which it is carved had been over the tomb of a warrior in some other part of the grounds, and the slab removed and made use of as a corner-stone of the chapter-house.

A fine stone coffin was found near the south transept (might this have been that of Richard II. ?), and over it three massive blocks of stone. On lifting these a skull was seen, but at the foot of the stone coffin, showing that the dead had been previously disturbed. There was a large beam of black oak under the stone coffin, and others squared and resting on piles, to prevent the foundations falling in, for at no great depth water is found here, and the clay had well preserved the timber. Some of the logs have been raised and can be turned to good account, as the proceeds of their sale for souvenirs of the ancient edifice may help to enclose the foundations. It is proposed to make chairs for the Provost and Dean of Guild of Stirling of this oak.

Between the high altar and the thorn tree a slab of coarse blue marble or mountain limestone lay under the soil, it was in a slanting position as if disturbed formerly; one corner of it was broken off, and it was also cracked across. What remained of the slab measured about five feet square and seven inches thick. It had a hewn margin, and was hewn as a panel across its rough face. This was the usual royal tablet stone seen at Dunfermline, Dunblane, &c.¹ On close inspection bat-holes were seen with lead in them, these had held the monumental brass of which two portions were found, the one with the figure of a flower on it, the other marked with cross lines; the larger portion with the inscription had been torn off and removed.

It was resolved to look for a vault under the slab. It was accordingly

¹ Lately blue mountain limestone has been found at the Abbey Craig; and this may be the quarry which produced the royal slabs, and the freestone there built the old churches, which also is now employed for the Wallace Monument.

raised, and on digging down a few feet a large oak coffin was found, the feet touching the enclosure of the high altar, the head to the west. Inside the coffin was a skeleton, doubtless of King James III. On being exposed to the air most of the bones crumbled to dust, some remained, fragments of the skull and of the lower jaw, two molar teeth, thigh bones, &c. Moist clay surrounded the coffin, which had preserved it so long. The pieces of the coffin which remained showed the grain of the wood—oak, and probably from the neighbouring Torwood. On the left of the male bones were those of a female, also the bones of a child. The three bodies had been disturbed before, perhaps for the sake of any ornaments which had been buried with them. A small coffin ornament of metal was found, in shape like a flower. The bones were carefully placed aside for re-interment, and the tombs are to be enclosed.

In clearing out the foundations of the church great quantities of bones were discovered, also on the south side of it, and about the chapter-house. I took with me one day Colonel Monro, Bombay Army, and Dr Alex. Paterson of the Bridge of Allan, to examine some of these remains previous to their being again committed to the earth. The remarks of the latter gentleman are as follows:—

“I examined many of the relics found during the recent excavations. A number of human skeletons were discovered, most of them in a state of great decay. The bones in the meantime had been carefully put into boxes and deposited in the tower of the Abbey. By far the most interesting set of bones are those of King James III. Unfortunately the only bone of the king found entire is the lower jaw, which is remarkable on account of its large size,—only two molar teeth remain in the jaw. The frontal part of the cranium is well preserved, and from the appearance of this part of the skull it shows that the king must have had a very low receding forehead.¹ The only other circumstance worthy of

¹ Historians say of James III. that in rude and warlike times he was unable to control his turbulent nobles, whom he also vexed by secluding himself from them and passing his time with architects, musicians, and astrologers, on whom he conferred rank and distinctions. The highly interesting and valuable description by Mr David Laing of the altar screen now at Holyrood Palace may be referred to for the general appearance of the King and of Queen Margaret. (See Proceedings, vol. iii. p. 8.)

notice in regard to the bones of the king is, that they differed in colour from all the other bones found, those of the king being of a dark brown tawny colour; this colour may have been produced by the decay of the oak coffin. A number of entire skulls were found; a curious fact connected with them is that in all of them the cranial cavity is filled with clay in a solid condition; the clay must have got into the skulls through the action of the water."

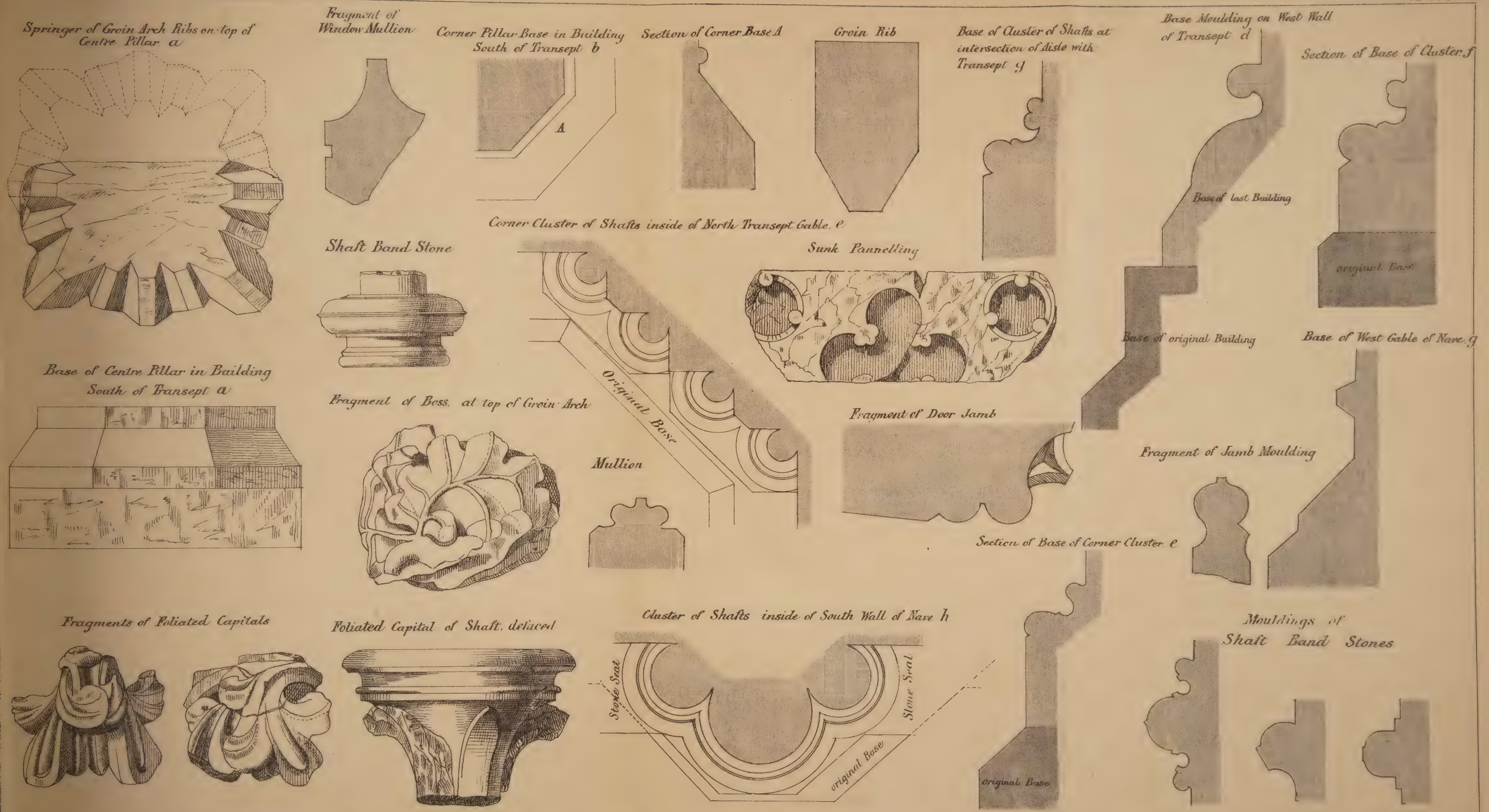
I have had casts taken of the cranium and lower jaw of the king by Mr Barclay, the sculptor in Stirling; and also had an oaken chest made to contain the royal remains, that they might be re-interred with every respect.

Mr William Mackison, C.E., the town architect, Stirling, was in attendance at the commencement of the excavations, and thus remarks on the discoveries:—"When the walls of the north transept, part of the chancel, and of the nave were exposed, the stone dressings, facings, and cuttings were found in wonderful preservation, and the outlines very decided. Two distinct base courses are particularly traceable in the transept. The angle buttress is built over the remaining portion of the original square one, and that part of the wall which is in the continuation of the transept gable, and which forms the northern wall of what is supposed to be the chapter-house of the last structure, is neither in the proper line nor the original base over which it is built, nor with the building of which it forms a part. Angle buttresses have been always troublesome. . . . In connection with the transept a small door is noticed in the west side-wall, facing the belfry tower, built up closely with dressed masonry.

"The walls have all been grouted most effectually, some places so much so that it is with difficulty one can say whether he is not looking on solid stone rather than a conglomerate mass. Many oyster shells were dug up and river sand, and these shells seem to have been freely used in the mortar and grouting."

Mr Mackison took accurate measurements of the buildings (and a reduced copy of his plan is given in Plate IV.)

"Part of the nave wall exposed, towards the small cemetery, is of good design; the stone seats and bases of four of the side piers are to be seen,



giving a good idea of what the appearance of the interior must have been. The mouldings, trefoil in outline, of the shaft column bases are in fair preservation. The south wall of the nave has been traced west to the wall which surrounds the burial enclosure, and from what the gravedigger stated the bases of pillars (or piers) are also to be seen in the grave-yard. The enclosure at the high altar is formed by dressed stones, having a check for covers much decayed."

A casual observer may not remark a massive pinnacle with a finial like a human head which no doubt belonged to the old church; it is now placed on its end on the south wall of the grave-yard; it has a very weather-beaten appearance, still, however, retaining its original form.

Mr Rothead, the architect of the Wallace Monument, &c., in a communication to Mr J. M. Mitchell, F.S.A. Scot., Belgian Consul-General, thus writes:—"The area of the building at Cambuskenneth, as far as disclosed to our view on the first day of the excavations, is of the most interesting description, and exhibits the splayed base lines of the north side of the abbey, being perfectly sharp and fresh as when built, and of an early though somewhat curious character. By the insertion of the ovolo, a curved character of the upper member (A) of the splay base, the roll moulding (B) just above is a very conclusive evidence, along with the other parts below, of early pointed work, having quite a different character, so to speak, from that known as early English pointed Gothic. The Cambuskenneth Abbey ruins, as indeed I will venture to say from my intimate acquaintance with Continental pointed architecture, partake of the French model largely, as indeed does the whole ecclesiastical architecture of our country; hence the blending of the baronial character in our abbeys and churches; and in illustration of this fact I would point to Stirling High Church, parts of Dunfermline Abbey, Inchcolme Abbey and Monastery (Firth of Forth), and the deeply interesting remains of Inchmahome Priory or Monastery, founded 1328, at Port of Monteath; and let me add one other instance, the old church of Linlithgow, as strongly corroborative examples of homogeneity of style of French example and extraction.

"The base lines of Cambuskenneth Abbey are from three to three feet six inches high, and so fresh are the surfaces of the stone splayed faces,

that they carry the incised masonic marks of the artisan who cut and fashioned the stone, as perfectly as if done but yesterday.

"At our first visit portions of the great stools of the piers that carried or may have carried an imposing tower and spire were uncovered, exhibiting a very peculiar formation and character of base moulding, in most excellent preservation, section and plan thus (see Plate IV., No. 2); the base moulding above is all that is left, that is, so far as was uncovered at the first visit.

"The pavement of the area of the nave was partially laid bare, and near it we discovered the section line of some four or five steps, leading from the nave of the western portion of the abbey into the choir, close to the entrance of which stands what seems to have been a magnificent sepulchral vault, the cell of which, roughly speaking, may be about from seven to eight feet long, by four feet broad or thereby, having thick walls all round, carefully built, and throwing projections out from these lines of walls as if light buttresses had formed a portion of the design of the elaborate shrine that undoubtedly must have surmounted the whole tomb; if we are to judge from the large mass of fragmentary and smashed-up heaps of foliated capitals, and six-inch diameter shafting, moulded bases and mid-shaft clasps that were dug up all around the fine tomb, out of which, and at about three or four feet deep (from base lines of tomb), was excavated the remains of at least one male skeleton having a finely developed skull, thigh bones, &c., all in a high state of preservation. Near to or around this tomb were found some four or five elongated encaustic tiles, red and blue, and yellow glazed, say about eight or nine inches long, five inches broad, by one and three quarters of an inch thick.

"A specimen of fragmentary stained glass, bearing marks as if partially fused by fire, was found, likewise a silver sixpence of the time of Edward II., on the morning of our visit. I hope still further to see the progress and to witness the finish of this most interesting work of research and discovery."

Finally, it is gratifying to know that Her Majesty's Government and the Trustees of Cowan's Hospital will cause these most interesting foundations to be enclosed, and the royal tombs preserved from desecration. It might be useful also to run asphalt over the remains of the walls, and

paint with oil the delicate carved work to prevent injury from the weather. After more trenching, but without disturbing the bones, the area of the building might be covered with sand or gravel to keep down the grass.

Mr JOSEPH ROBERTSON suggested a doubt whether there was any evidence to show that either the Abbey or most of our ecclesiastical buildings had been ruined by Knox and his followers, as stated in the paper.

In this view he was supported by Professor STEVENSON and other Members.



View of Beaton's Mill, where King James III. was slain.¹

Mr LAING said, that having prepared some notices connected with the interment of King James III. and his Queen at Cambuskenneth, he would submit them to the present meeting, as a suitable addition to Sir James Alexander's very interesting communication.

¹ See notice of the house on the following page.

II.

NOTES RELATING TO THE INTERMENT OF KING JAMES III. OF SCOTLAND AND OF HIS QUEEN, MARGARET OF DENMARK, IN THE ABBEY CHURCH OF CAMBUSKENNETH. BY DAVID LAING, Esq., FOREIGN SECRETARY OF THE SOCIETY.

King James III. was slain on the 11th of June 1488, in the 28th year of his reign and 35th of his age. Nimmo, in his "History of Stirlingshire," says, "the place where this barbarity was committed is well known in that neighbourhood by the name of Beaton's-miln, said to be so called from the person who at that time possessed it; it is yet standing, though now converted into a dwelling-house, new and more commodious milns having been erected near it. The lower parts of its walls are still the same which received the unfortunate James. The stones wear the marks of antiquity, being much mouldered by the weather in the course of so many ages."¹ A view of the house is represented in the drawing by Sir James Alexander (see wood-cut at p. 25); it stands on the east side of Sauchie Burn. According to Buchanan's statement,² the king's interment took place in Cambuskenneth Abbey on the 25th of that month; and this statement is repeated by other historians. The mere circumstance that Sauchieburn, where the King was slain, is within a few miles of Cambuskenneth, would have had but little influence in selecting that Abbey as the place of his sepulture in preference to the Abbey of Holyrood, where his father, James II., was interred, or to Trinity College, Edinburgh, the burial-place of his mother, Mary of Gueldres, but was undoubtedly owing to the fact that his Queen, Margaret of Denmark, had previously been buried at Cambuskenneth.

Notwithstanding the silence of most of our historians, it is quite certain that Queen Margaret predeceased her husband, probably in the town of Stirling. In the contemporary chronicle of James Gray (fol. 22),

¹ History, &c., p. 230; Edinb. 1777. Second edition, p. 256; Stirling, 1817.

² "Ea igitur consultatione dilata, Edinburgum eunt. Ibi certiores de morte Regis facti, *funus ei amplissimum faciendum curant, ad Cammiskennethum, Coenobium Sterlino vicinum, ad vicesimum quintum diem mensis Junij.*" (Hist. lib. xiii.)

we find this brief notice:—"Obitus Margarite Regine Scotie apud Striuelin, 1^m iiij^c lxxxvi." In like manner, Drummond of Hawthornden says, "Margarite the Queen about these times, a good and virtuous lady, died 1486, and was buried at Cambuskynnel the 29th of February."¹ This would be the year 1486-7, which, as Pinkerton² remarks, was not bissextile; but I find a reference to another authority, which gives the day as the 27th of February. The most remarkable proof, however, of the fact is, the King's desire to contract a second marriage. On the 27th of November 1487 an indenture was subscribed at Edinburgh³ by commissioners of the two kingdoms for establishing a lasting peace; and at the same time overtures were made for negotiating three marriages—that of James III. himself with Queen Elizabeth, the widow of King Edward IV. of England, and of Prince James of Scotland (afterwards James IV.), and his brother, the Duke of Ross, with two of the daughters of the same English sovereign. But not one of these alliances was fated to take place. It is farther evident that during his reign James himself had appointed a chaplain to sing masses for Queen Margaret. On the 3d of August 1488, the Treasurer paid "To a Prest callit Schir Thomas Mersell *that sang for the Qwene in Stirling*, L.4.0.0." After the king's death, James IV. appointed the same priest, Sir Thomas Merschell, to perform this service, as expressed in the Treasurer's Accounts, "Item, to Schir Thomas Merschell *that singis for the King and Qwene in Cambuskynnell*," and he continued till at least November 1507 to receive his half-yearly fee of L.6, 13s. 4d. Among other payments, 5s. was given "to the cobill mane (boatman) of Cambuskynnell quhen the King past oure (crossed over)," the 27th April 1490; and three days later, "Item, to the Abot of Cambuskynnell, be a precep of the Kingis, that he lent to the King quhen he wes Prince, L.100."

The Abbey of Cambuskenneth was dedicated to the Virgin Mary, and is usually assigned to the middle of the twelfth century. It was for monks of the Augustine order; and from the first had received royal patronage. The church of Kippan had been granted to the Abbey by Walter, Earl of Menteith, and Alexander, his son and heir-apparent, for

¹ Drummond's History, p. 106. Lond. 1655, folio.

² Pinkerton's History, vol. i. p. 324, *note*.

³ Rymer's Feadera, vol. xii. p. 328.

salvation of their own souls, and of Matilda, the wife of the said Alexander, and for their sepulture appointed to be within the monastery.¹ There is no date to this grant; but in confirming this grant, on the 6th of April 1496, James IV. added clauses *de novodamus*, which prescribe the usual religious services for the salvation of the souls of his own most noble father James III., and Margaret his spouse, of happy memory, *whose bodies* (it is added) *rest in our said monastery of Cambuskenneth*. The following are the words of the charter, as recorded in the Register of the Great Seal, lib. xiii. No. 231 :—

“Carta super Rectoria et Vicaria Ecclesie de Kippane et jure patronatus ejusdem alias data per Comitem de Menteith et nunc de nouo per Regem Monasterio de Cambuskynneth et Canonicis ejusdem.”

After reciting the words of the original grant, with reference to the burial of Alexander Earl of Menteith and Matilda his spouse within the said monastery, one of the clauses introduced is to this effect :—

“Nos igitur in honorem Dei omnipotentis prefateque gloriosissime Virginis et matris sue Marie ac pro salute animarum quondam nobilissimorum Patris et Matris nostrorum Jacobi Tertii et Mergarite eius sponse bone memorie, quibus propicietur Deus, *quorum corpora in dicto nostro Monasterio requiescunt*. Necnon orationum suffragiis pro nostris Patre et Matre antedictis ac pro nobis et successoribus nostris perpetuum fiendis Ratificamus, approbauimus, &c. Apud Striueling sexto die mensis Aprilis, anno Domini Millesimo quadragintesimo nonagesimo sexto, et Regni nostri octauo.”

The various payments in the Treasurer's Accounts, of a subsequent date, during the reign of King James the Fourth, having reference to Cambuskenneth, all clearly point to the erection of the *lair* or place of sepulture within the monastery, not for his parents, but for the King himself. The following entries may be quoted :—

- 1501–2, March 15. Item to David Prat and the masounis that hewis the lair in Cambuskinnethe, of drinksilver, xiiij^s.
 1502, June 7. Item, to the werkmen in Cambuskinneth, of drinksilver, be the Kingis command, iij^s.

¹ Dalryell's Analysis of the Chartularies of Cambuskenneth, &c., p. 23. Edin. 1828, 8vo.

- 1502, June 12. Item, giffin to David Prat quhen he began the laying of the lair in Cambuskinneth, xliij^s.
- 1502, July 10. Item, in Cambuskinneth to David Prat and the masounis that workis on the lair, be the Kingis command, xxviiij^s.
- 1502, December 20. Item, to David Pret to by colouris to the Kingis lair in Cambuskynneith, xxviiij^s.
- 1502-3, February 16. Item, to David Pret payntour in part of payment of the making of the Kingis sepultur in Cambuskinneth, xliij lib.
- 1503, May 3. Item, to David Pret in part of payment of the sepultur making in Cambuskinneth, vj lib. xliij^s. iiij^d.
- 1508, July 5. Item, to the Almanye (the Flemish or German artist) that suld mak the Kingis lair in Cambuskinneth in marbill, xxviiij^s.
- 1508, July 7. Item, to the Abbot of Tungland to gif the man that suld mak the Kingis lair in Cambuskynneith, iiij lib. iiij^s.
- 1511, November 10. Item, to the botesman of Cambuskynnel for turning (carrying) the King our the wattr, iij^s
- (Same day.) Item, in Cambuskinneth to the masounis in drink-silver, xxviiij^s.

It may be added that Ferrerius, in his continuation of Hector Boece's Chronicle, in recording the death of James III. in 1488, says, "*Et ad Cambuskynneith cœnobium canonicorum S. Augustini regia pompa delatum sepulturæ traditur: ubi et hodie tumulus, in quo cum Regina uxore sua conditur, magnifice olim extractus cernitur.*"¹

The calamitous death of King James IV. at Flodden, in September 1513, aged 41, was the means of rendering unavailing his purpose to have had his resting-place in the tomb which had for many years been in preparation. His body was carried to London, and treated with indignity, although Henry VIII. in his letter to Pope Leo X., on the 12th October, had signified his desire, on obtaining the sanction of his Holiness, to pay royal honour to his brother-in-law, by an interment within St Paul's

¹ *Scotorum Historia a prima Gentis origine, &c.*, p. 401. Paris. 1574, folio.

Church; but the Scottish King being under the ban of excommunication, this intention was neutralised, and his body was deposited in the Abbey of Shene or Richmond.¹

The priest who succeeded Merschell to sing for James III. and his Queen at Cambuskenneth was Sir James Inglis, apparently in the year 1508 or 1509.² He continued to hold this benefice for upwards of forty years, as we learn from the Treasurer's Accounts. On account of his advanced age, between the year 1550 and 1552, Inglis seems to have resigned in favour of Sir Robert Paterson. The Reformation in 1560, of course, put an end to all such religious services.

POSTSCRIPT.

[The success which attended the operations of clearing out and tracing the foundations of the Abbey of Cambuskenneth has been greater than was anticipated. No discovery of articles of special antiquarian interest has indeed been made, but it was of importance that the actual site, the form, and dimensions of the buildings should, if possible, be ascertained, as well as the precise spot where James the Third and his Queen were interred. These points were hitherto quite conjectural, as the only visible portions above ground were two detached objects, the upper part of an arched doorway and the lofty tower. It remained, therefore, to be seen what results might attend the exploring of the raised mounds covered with greensward for the space of nearly three centuries.

I have little to add to the details given in the preceding communication by Sir James Alexander: the portion of ground enclosed as a small public cemetery unfortunately proves to have been the western part of the nave of the Church, and this necessarily precluded any exploration in that quarter. But by clearing away the earth on the exterior to the

¹ Dunbar's Poems (Supplement), vol. i. p. 281.

² Dunbar's Poems (Notes), vol. ii. p. 394.—The Treasurer's Accounts from August 1508 to August 1511 are lost.

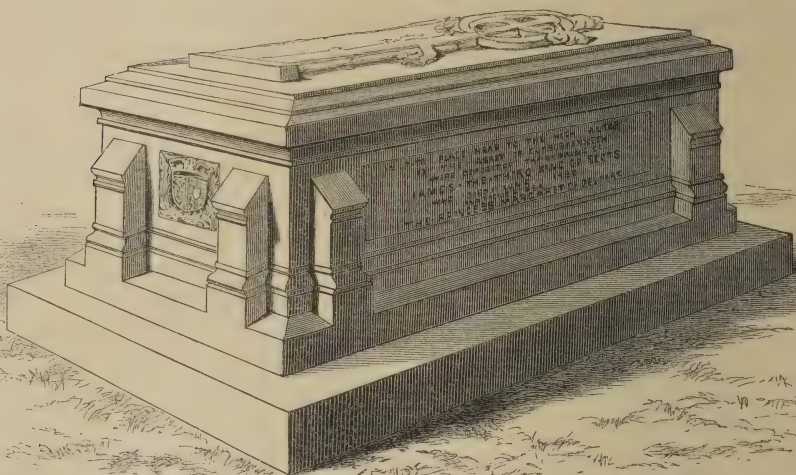
depth of about two feet, the original west door of the Church was brought to light, exhibiting its Anglo-Norman character in its moulded shafts and bases, thus materially serving to ascertain the form of the entire building. The question also naturally arises, Where was the site of this mausoleum erected by James IV.? That it was an imposing structure inside of the church cannot be doubted, and some indications still visible clearly point out the place to have been in the nave, not far from the south transept, which Mr Rothead has described at p. 24; and it seems equally certain that this sepulchral vault had been surmounted by a splendid shrine. Such a structure being near the centre of the church, might be one of the first objects destroyed, either in the hope of plunder or of employing its rich materials elsewhere.

THE TRUSTEES OF COWAN'S HOSPITAL, to whom the property belongs, have shown no ordinary degree of zeal and liberality in carrying on these operations. As above stated by Sir James Alexander, they have now resolved to enclose the whole of the ground, and by new pointing and other repairs on the Tower, which has always been a picturesque object, it will be secured from the injurious effects of the weather. Such a liberal and patriotic spirit merits the praise of all true antiquaries.

Another fortunate result has likewise to be recorded. The Provost of Stirling entered into a correspondence with the HOME SECRETARY, on the propriety of erecting some monument to commemorate the place of royal interment. The Right Honourable WILLIAM F. COWPER, Her Majesty's First Commissioner of Public Works, having, upon inquiry, satisfied himself that the site was now well ascertained by the discovery of human remains in that part of the Abbey church where the High Altar must have stood, he brought the matter under the Queen's notice; and HER MAJESTY was graciously pleased to command that a suitable Monument be erected. This is now nearly completed from a design prepared by Mr MATHESON, of the Board of Works, Edinburgh (see the annexed drawing). It is composed of beautiful freestone, about $4\frac{1}{2}$ feet in height, 8 feet long, and $4\frac{1}{2}$ feet broad at the base, and 3 feet at the top.

The following inscription is cut on one side the Monument :—

IN THIS PLACE, NEAR TO THE HIGH ALTAR
OF THE ABBEY OF CAMBUSKENNETH,
WERE DEPOSITED THE REMAINS OF
JAMES THE THIRD, KING OF SCOTS,
WHO DIED THE 11TH JUNE 1488,
AND OF HIS QUEEN
THE PRINCESS MARGARET OF DENMARK.



On the other side :—

THIS RESTORATION OF THE TOMB OF HER ANCESTORS
WAS EXECUTED BY COMMAND OF
HER MAJESTY QUEEN VICTORIA,
A.D. 1865.

At one extremity of the monument the Royal Arms of Scotland (the Red Lion on a field of gold) are sculptured, surmounted by a crown, and supported by the unicorns, with the motto—IN DEFENCE.

At the other, the Royal Arms of Scotland impaled with those of Denmark, surmounted by a crown, and surrounded by a wreath of thistles.

It only remains to add that, on Saturday the 23d September 1865, according to the newspaper report, the Provost of Stirling, and various other persons interested in the proceedings, assembled at the Abbey of Cambuskenneth, when the remains (as supposed) of King James III. and his Queen were deposited under this monument. From this report may be added the following extract :—"The remains having been carefully deposited in the recess of a sarcophagus, and the mason-work of the tomb completed, PROVOST MURRIE of Stirling briefly addressed those present, to the effect that they had now witnessed the re-interment of James III. and his Queen in the sarcophagus and tomb ordered by Her Majesty QUEEN VICTORIA—a memorial which did great honour to the best feelings of Her Majesty. The structure was also highly creditable to the skill and taste of the designer, Mr Matheson, of the Board of Works, Edinburgh, and also to the contractor, Mr John Rhind of Edinburgh. From the beautiful situation of the memorial, and surrounded as it was by so many historical associations, he (the Provost) had no doubt it would be a favourite attraction to the numerous strangers who annually visit Stirling and its neighbourhood. The Provost then thanked those present for their attendance, and the interesting proceedings terminated. It may be added that the ground around the spot is to be laid with gravel, and the whole enclosed with an elegant iron railing."

D. L.]

III.

ACCOUNT OF A MANUSCRIPT OF THE ELEVENTH CENTURY BY
 MARIANUS OF RATISBON. BY THE RIGHT REV. BISHOP ALEXANDER
 P. FORBES, D.C.L.

By the courtesy of the Rev. Father Anselm Robertson, the last of the Scottish Benedictines of Ratisbon, I am able to give an account of a curious MS., written by the founder of the monastery, Marianus of Ratisbon, and finished by his disciple Johannes.

It has been in the possession of the monastery for eight hundred years, with the exception noted below, and has been brought to Scotland on the occasion of its suppression by the Bavarian government.

A learned paper by Dr Reeves, read on April 9, 1860, before the Royal

Irish Academy, and published in the Proceedings of the Academy, vol. vii. pp. 290-301, has introduced Marianus to the knowledge of English readers.

Quoting from the *Vita Mariani*, published by the Bollandists in the "*Acta Sanctorum*," Febr., tom. ii. pp. 365-372, Dr Reeves gives an account of the foundation of the Scottish monastery of Weich. Sanct. Peter at Ratisbon, in the year 1076, and specially mentions the industry and skill of this monk as a scribe. "Such," says the memoir, "was the grace of writing which Divine Providence bestowed on the blessed Marianus, that he wrote many and lengthy volumes with a rapid pen, both in the Upper and Lower Monasteries. For, to speak the truth, without any colouring of language, among all the acts which Divine Providence designed to perform through this same man, I deem this most worthy of praise and admiration, that the holy man wrote from beginning to end, with his own hand, the Old and New Testaments, with explanatory comments on the same books, and that, not once or twice, but over and over again, with a view to the eternal reward; all the while clad in sorry garb, living on slender diet, attended and aided by his brethren both in the Upper and Lower Monasteries, who prepared the membranes for his use. Besides, he also wrote many smaller books and Manual Psalters for distressed widows, and poor clerics of the same city, towards the health of his soul, without any prospect of earthly gain."

Dr Reeves goes on to mention three of the transcripts of this pious man.

1. A Psalter, with a commentary, preserved in the Neiderminster at Ratisbon, described by Aventinus in the "*Annales Boiorum*," p. 554, ed. 1554.

2. "*Liber Mariani genere Scoti excerptus de Evangelistarum voluminibus sive doctoribus*," now preserved in the British Museum. (Cotton. Tiberius, E. iv. 26. foll. 162-178.) It was damaged by the disastrous fire in 1731; but has lately been repaired.

3. A copy of the Epistles of St Paul, with an interlinear gloss, apparently by Marianus himself, and a copious marginal commentary, consisting of extracts from the Fathers and theological writers popular in his day, preserved in the Imperial Library at Vienna. This MS., as I am informed by F. Anselm, the monks of St James' have been searching

for more than two hundred years. It is specially valuable as giving the Gaelic name of the scribe, Muiredach Mac Robertaig; by the Irish interpreted M'Ruertie or Magroertie, and modernised into O'Rafferty and M'Grotty.

The interesting volume which I proceed to describe consists of a series of ascetic treatises, well known to all mediæval students, and all of which have been printed more than once. They are as follows:—

CODICES QUOS CONTINET ISTUD VOLUMINE.

1. Dicta Basilii Magni ad Exhortandos Monachos.
 2. B. Effraim, lib. vii. 1^{mus}. est de Judicio Dei, et Resurrectione, &c.
 3. S. Cesarii Homiliæ ix. ad Monachos.
 4. Autperti Presbyteri libellus de Conflictu Virtutum et Vitiorum: D. Augustino vulgò ascriptus. (It is to be found in the sixth vol. of the Benedictine edition of that Father, with a short and interesting admonitio prefixed to it, attributing it to Ambrosius Autpertus, Abbas S^{ti} Vincentii ad Vulturum in Benevento.)
 5. Isidori Hispalensis Synonyma duobus libris distincta.
 6. Alcuini Sermo de Virtutibus.
 7. Martini cujusdam ad Mironem Regem libellus de IV. Virtutibus. (Of this Mr Coxe of the Bodleian says, "Martinus (Damianus) de iv Virtt. occurs often with the letters of Seneca and St Paul.")
 8. Smaragdi Abbatis libellus Diadema Monachorum nominatus. (It is to be found in the 16th volume of the "Bibliotheca Maxima Patrum.")
- The codex is of parchment, 10½ inches long by 7¾ inches broad. There are 141 folia. There is very little decoration on the initial letters, which are coloured with vermilion only. The sheepskin is in many places pierced with holes, most of which have been filled in with patches neatly sewn in with horsehair. The horsehair is as strong and as crisp to the touch to-day as it was on the feast of St Martin and Udabrick, that is, July 4, in the year 1080. It is not in the original binding. The present binding is of strong oak, backed with white vellum; stamped on the back is, "Autographum Beati Mariani Scoti." Within is—"Liber Monasterii divi Jacobi Scotorum Ratisponensis quem conventus fecit denuo ligari (anno Domini 1524)." Then in the same hand as the

last—" . . . facito aliquid agis ut semper te diabolus inveniatur occupatum."

And below, in a hand of the sixteenth century, "Volumen hoc manu Beati patris Mariani conscriptum magna veneratione ideo habendum censeo, quod precipius nostratum in hac urbe Marianus monasticen coluerit. Fundator dictus et a Patribus nostris Sanctus quoque appellatus." In the margin, "In Necrologio ad 9 Cal. Maii." Then follows a list in the same hand of the contents. On the other board there is scribbled "Jesu . . . Jesu Maria;" and in a sixteenth century hand the important information,— "I am ane guid writar, and I (if I) had ane guid pen." At the bottom, "miseri hominis anima requiescat in pace."

On the first page of the manuscript itself is, "Ex libris. Monasterii S. Jacobi Scotorum Ratisbonæ redemit ex alienis manibus, post centum circiter annos, Bernardus Baillie Abbas. an. 1737." Bernard Baillie was Lord Abbot of St James', and died in 1743. Below there are traces of an erasure.

The first thing to be noted is the existence of certain inscriptions at the bottom of the pages, which are generally pious invocations of saints, suggesting probably the day or rather night on which the particular passage was transcribed. The greater part of them are in Latin, but some are in Gaelic. By the aid of the Rev. Dr Reeves I am enabled to give their interpretation. His communication is as follows:—

"I am unable to say why Marianus so often commemorates St Gervasius and Protasius. I know of no local veneration of them in Ireland. There must have been some special connection between the 19th of June and some event in the history of Marianus.

"The entries which you sent me resemble those which are found in the St Gall Irish MSS., mentioned in the Preface of Zeuss's 'Grammatica Celtica,' and those which are noticed in my paper on Marianus of Ratisbon.

"Your notes are as follow:—

and

The intercession of Gervasius and Protasius on their festival to-day to
 Fol. 41. Impebe gepuap j Ppota ara peil indiu pop
 with the God of mercy (or forgiveness).
 [or ppi] dia in silgus

Fol. 136. Domine Jesu Christe propter tuam magnam misericordiam misero Joanni propitius esto.

Fol. 137. Sit nomen Dni. &c. Sanctissima Maria et Sancti Dei omnes pro misero Johanne apud Dominum nostrum Jesum Christum intercedite, ut sua ei demittantur peccata.

Below are some erasures hopelessly illegible. The last page is a treatise on the text "Dixit Dominus ad Abraham egredere de terra tua," &c. The author of the note in the hand of the sixteenth century that gives the text at the beginning, says, "Authorem hujus commentationis B. V. N. Marianum ideo facio, quod eam ipse scripsit peregrinis nobis accommodatam, neque alium auctorem cognosco." On the verso of this page there is a great deal of erasure.

It is followed by a part of the office, "In Cœna Domini ad Mandatum," consisting of the 13th to 17th chapters of St John, beginning, "Ante diem antem festum paschæ," ending "dilexisti in ipsis sit et ego in ipsis."

This extract is from the Latin Vulgate, although here and there some of the words are transposed. The sections do not entirely correspond with the present division of chapters.

Immediately after this, at fol. 141, there is a gift of certain properties, dated, "Tertia Kalendas Aprilis hodie in quinta feria A.D. millesimo octagesimo tertio, mee autem peregrinationes pene septimo, et hujus loci habitationis ab Scottis octavo. Regnante quarto Henrico. Miseri Johannis anima requiescat in Dei Pace Amen."

In the hand of the sixteenth century, there follows this note,—“Ex hoc, 50 annis vetustius D. Petri prioratum, hoc S. Jacobi Monasterio deduces, si secundum indubitatas has rationes, ex subductis 8 annis 1076 primum incolatur a Scottis D. Petri annum 1128 fundati S. Jacobi annum conferas.”

The document is as follows:—

“Cunctis fidelibus notum fore cupimus, quod domina Luikardis advocatissa, mater Friderici Ratisponensis advocati vineam unam in villa que dicitur Rinnebach, et tres particulas vinearum que unam perficiunt vineam in eadem villa cum omni terticea que vinitoribus eorum vinearum debetur, curtim etiam et duos piscatores in villa que diciter Frishaim Bernoldum videlicet et Hinricum duos Germanos dimidiam etiam huvam

que septuaginta denarios annuatim persolvit in villa que dicitur Braitin-felt Hainricum vinitorem pelliparium Sivgerum pro remedio anime sue et parentum suorum Deo et S. Petro extra muros Ratispone et Scotis ibidem [com]morantibus contulit, Cujus rei testes sunt Rodigerus prepositus. Conradus trusarius. Karolus Gdno. villicus. Rotlib pistor. Adalbrech Berhtolt carpentarius. Gerloch de S. Petro. Rodolf van Snaithart. et plures alii.

On the reverse of the last page is a long list of names :—

“ Henricus dux Bawarie—Luitkarth advocatissa				
frat nr				
Salemon dux de Boemia [a hopeless erasure] Wernhart van f . . .				
filius Bernoldi				
Odalricus Odalricus . Chuno Hirmgar Mafrû Maetilt				
de oreigne de ayel marberg de Naburch				
Almannus	Walt.	Margareta	Conrat	Hadhlalt Adalbrech
de mimbore				[Cisila Judita Cuonrat
Rueger Asbrect. Luibinc unillibire Maethilt Gisila Heinrich Iudita				
Bartho Comes et filius ejus Hermannus et Gerdrut et Hildigart				
file Steph. de Campo				
Et Helena Sophia filie ejus Henricus Diebold Vihi Linta besra				
Sigibld Cuinnec	Rudeger prb.	Verislaus rex mobnanna	Tomel	
			Ricart	
Friderun. Hainrich	Rudeger rect. ru		Tietrich	Adalbert
Godbold. Rudiger	Wesel [erasure]	Adalbert	Matdelt	Cuano
Judita Hainrich.	Alstein	Burchard	Hizele	Hebernolt
Eppo. Adalbrech	Dragbod	Luitbold	Helica	Diamot
				Ricart
Hildegait. Bertolt.	Husmān	Adalbrech	Herlog	Martin
fidelis sine fil				
Eggebrecht Megiihart	Hermricus	Maria	Diamot	Herburgt
Otto. Hainrich	Bertoldus	Laurentius	Macdilt	Judita
			Macdilt	Judita
Kadloch. Herbrech	Titus. sil in 7 tibi est	Benedicta	Regin	Hirmgar
Adalben	Livi mulier nondum ne Michul		Geldrūt	Sicilt
Winniger	Herchinbold me	Fridrath	Vulberg	Helica
			Ita	Gosam
Cuonrad	Woppo	Ruodalf	Bernait	Duta

Efferad	Cūno	Maria regina	Gixla	Cumguit
Luitkar	Mascelin	Titrich	Hisa	Adalata
Adalbeit	Cothscaig	Arba	Budin	Cuno
Adalbrat	Echen	Hildigard	Vultberg Udo	Sicer Bertolt
Sigifrit	Hugo	Dofrisclav	Getlin	Helica
Cumbrect	Bertolt	Sigifridus	Adalbrer	Berta
Elaim	Martinus	Cristina	Helica	Gizla
Hohelt Heli	Hermannus	Judita	Maccail	Uuoco
Gūbrec Gotfrit	Burchard	Lubolt	Henric	Helica
Valter Gepga Gotfrit	Luippold	Mergert	Heuzbend	
Joada Ruace Hildigart	Petrus. pbr.	Berta	Berta	
		Helfei	Getzo	
Radolman Adalbrec	Burchard	Ruadger	Hirmgart."	

The Henry Duke of Bavaria mentioned in the list at the end, must be the son of that Rudolph of Bavaria who set up as anti-emperor, and supported by Pope Hildebrand, died in 1080. I cannot make out who the Maria Regina is, or Salemon Dux Boemiæ.

I have thus given an account of the peculiarities of what may be said to be one of the most interesting manuscripts in Scotland. In date it comes next to the book of Deer, and is anterior to the celebrated "*Liber Ruber*," which contains the ancient privileges of the Church of Glasgow. During the summer in which it was written, Ingulphus was composing his history, Marianus Scotus compiling his chronicle; Lanfranc and Bengarius contributing to the theological thought of the age; William I. of England consolidating his conquests; Gregory VII. fighting the battle of the investitures; and our own Malcolm Canmore, with the help of St Margaret, civilising Scotland.

Professor STEVENSON made some remarks as to the interest both of the paper and the manuscript which it described, and added that from the absence of invocations of any Irish saints except St Kilian, as well as the character of the writing and other circumstances, it was not unlikely that Marianus might have been a North Briton instead of an Irishman.

TUESDAY, 31st *January* 1865.

JOSEPH ROBERTSON, Esq., LL.D., Vice-President, in the Chair.

The following Gentlemen were balloted for and elected Fellows of the Society :—

AUGUSTUS W. FRANKS, Esq., A.M., of the British Museum, London ;

WILLIAM MACKISON, Esq., Architect, Stirling.

The Donations to the Museum and Library were as follows ; and thanks were voted to the Donors :—

(1.) By the late Right Honourable the EARL OF STAIR, F.S.A. Scot.

The lower portion of a Sepulchral Urn of coarse reddish Clay, showing a black fracture, and measuring 4 inches across the base. It contained calcined human bones, and was found on Fala Moor, Mid-Lothian.

(2.) By Mr JAMES PATERSON, Longman, Macduff.

Four Leaf-shaped Arrow-heads of reddish Flint, averaging 1 inch in length.

One Barbed Arrow-head ; and another, of grey Flint, with Stem and Barbs ; each arrow-head measuring about an inch in length.

Oval shaped Stone-hammer Head, 4 inches in length, with a perforation 1 inch in diameter in the centre, for the insertion of a handle.

Bronze Flanged Celt, measuring $3\frac{3}{4}$ inches in length by $1\frac{1}{8}$ inch across the face.

Small Iron Hammer, with iron handle, or Model Battle-Axe, 4 inches in length.

Small Plate of Brass in form of a death's head.

All the above articles were found in the district around Longman, Macduff, Banffshire.

(3.) By JAMES FARRER, Esq., M.P., Hon. Mem. S.A. Scot.

Oval-shaped piece of Sandstone, 5 inches in its greatest diameter, and 2 inches in thickness, rudely hollowed on each side, with a small perforation through its centre.

Fragments of reddish Pottery, apparently the remains of small bowl-shaped vessels.

Rounded piece of Clay, $1\frac{1}{2}$ inch in diameter, with a hole through the centre; probably a whorl for the distaff.

Double-edged small-toothed Comb of bone, $3\frac{1}{2}$ inches in length, with separate longitudinal bar of bone along its centre, attached by pins of iron, the corresponding bar on the opposite side is wanting.

Flat portion of Bone, measuring $13\frac{1}{2}$ inches in length by $2\frac{1}{2}$ inches in breadth, showing marks of cutting along its edge, and pierced with three holes, each $\frac{5}{8}$ ths of an inch in diameter; apparently a portion of the rib of a whale.

Two portions of the Antlers of a Red Deer, cut transversely across, the one $4\frac{1}{2}$ and the other $2\frac{1}{2}$ inches in length.

Canine Tooth or Tusk, of a Boar.

These articles were all found in the course of digging in the ruins of an old house in the parish of Deerness, Orkney.

(4.) By GEORGE PETRIE, Esq., Corr. Mem. S.A. Scot.

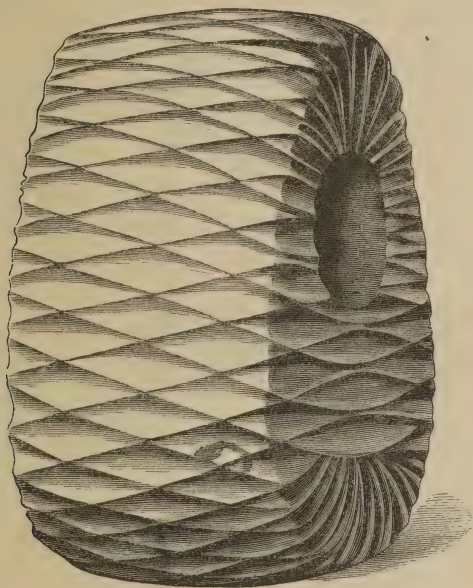
Block of irregularly-squared Sandstone, 17 inches in length by 10 inches in breadth, and 7 inches in thickness, with a volute or spiral, incised on its largest extremity, found in Orkney.

Square-shaped Sandstone, 8 inches in diameter, with a cup-shaped depression $4\frac{1}{2}$ inches in diameter, and 2 inches in depth, cut on its upper surface. It was found in a mound of stones and rubbish near the Church of Deerness, Orkney.

(5.) By the Rev. EDWARD LOWRY BARNWELL, Ruthin, N. Wales,
Corr. Mem. S.A. Scot.

Beautifully sculptured Hammer Head of pale flint or chalcedony, 3 inches in length by $2\frac{3}{4}$ inches in depth, and the same in thickness across the middle; it is perforated toward one extremity by a circular aperture $\frac{3}{4}$ ths of an inch in diameter. The hammer is figured of the

original size in the annexed drawing, for the use of which the Society is also indebted to Mr Barnwell. Mr Barnwell supplies the following notes respecting its discovery, &c. :—



Stone Hammer Head found near Corwen, N. Wales (full size).

“About twenty-five years ago, a man stubbing up a wood at Maysmore, near Corwen, found the hammer, which is made of the hardest chalcedony, none of which exists within many miles of the district.

“The enormous amount of labour that must have been bestowed on cutting and polishing would indicate that it was not intended for ordinary use as a common hammer. Various suggestions have been made. Some have considered it as the war implement of a distinguished chief; others, that it was intended for sacrificial or other religious purpose, or as a badge of high office. Others again have conjectured that it may have

been used as a counterpoise, or as a lamp. It is too large and heavy to have formed the central bead of a necklace, as has also been suggested.

"Whether it has been worked with metal tools or not is uncertain; but probably with the latter, owing to the hardness of the stone. The hole seems to be very *slightly* converging at each aperture, so slightly as to present a very faint appearance of such converging. How the polishing also has been effected is uncertain, as the ordinary method of friction would have been difficult, from the nature of the pattern."

(6.) By the DIRECTORS of the EDINBURGH ACADEMY, through JOHN M. BALFOUR, Esq., F.S.A. Scot.

Roman Altar of White Marble, with moulded panel and niche in front, which contains a bust of a youth in high relief, and below is the following inscription :—

DIS · MANIBVS
C · IVLIO · RVFO · VIX · ANN · XVIII · M · VI
PIENTISSIMO
PARENTES · ARAM · POSVERVNT

The altar measures 29 inches in height by $21\frac{1}{2}$ inches in width, and has been cut vertically through the centre, showing, from this cause, only a portion of a patera, &c. on the sides. The back part is wanting.

This altar has been for a considerable time in the possession of the Directors of the Edinburgh Academy, but its history is not known.

(7.) By Brigadier-General J. H. LEFROY, R.A.

Cast, in plaster, of the Royal Arms of Scotland, taken from a gun in the Museum of Artillery, in the Rotunda, Woolwich, which is described in the catalogue of the collection as "A brass minion of the time of Charles II., A.D. 1676," richly ornamented. On the first reinforce the words "IN DEFENCE," underneath them a crown, with the Royal Arms and supporters, and the motto "HONI SOIT," &c., in a scroll round it. In a second scroll underneath, "DIEU ET MON DROIT." The dolphins, representing two fish, are handsome. Length of gun, 6 feet 6 inches; calibre, 3·44 in.; weight, 9 cwt. 44 lbs. Then the inscription, "CAROLUS SECUNDUS DEI GRATIA, MAGNÆ BRITANNIÆ HIBERNIÆ ET GALLIÆ REX 1676." On the base ring, "JOHANNES OUDEROGGE ME FECIT ROTTERDAMI."

Official Catalogue of the Museum of Artillery in the Rotunda,

Woolwich. By Brigadier-General J. H. Lefroy, R.A. 12mo. Lond. 1864.

(8.) By D. H. ROBERTSON, M.D., F.S.A. Scot.

Iron Chain and Pot Hooks, from Maenab's Inn, Lochard, the original of the Hostelry of the "Clachan" of Aberfoyle of Sir Walter Scott's Rob Roy.

(9.) By Professor J. Y. SIMPSON, M.D., V.P.S.A. Scot.

Large and beautifully Sculptured Marble or Alabaster Slab from Nineveh, measuring 8 feet square by 6 inches in thickness. It displays the figure of a king performing a religious ceremony, attended by a Eunuch. There is an inscription in cuneiform characters on the lower portion of the slab. (See Communication, and Translation of the Inscription by H. Fox Talbot, Esq., at a subsequent meeting of the Society.)

(10.) By M. A. BERGSÖE, Copenhagen.

Grey-coloured Flint Dagger or Knife, with handle, measuring 7 inches in length, and $1\frac{1}{2}$ inch at the widest part of the blade.

(11.) By ALEXANDER AUCHIE, Esq., F.S.A. Scot.

Two Photographs, one of the Parthenon, the other of the Temple of Theseus, 15 by 11 inches, procured at Athens by the donor.

(12.) By ALEX. JEFFREY, F.S.A. Scot. (the Author).

The History and Antiquities of Roxburgh and Adjacent Districts, from the most remote period to the present time. 4 vols. post 8vo. Edinburgh, 1864. (With maps and plates.)

(13.) By the ASSOCIATED SOCIETIES.

Reports and Papers read at the Meetings of the Architectural Societies of the County of York, Diocese of Lincoln, Archdeaconry of Northampton, County of Bedford, Diocese of Worcester, and County of Leicester, during the year 1863. Vol. vii. part 1. 8vo. Lincoln, 1864.

(14.) By M. C. JONES, Esq., F.S.A. Scot. (the Author).

Reminiscences connected with Old Oak Panelling now at Gungrog. 8vo (pp. 40). Welshpool, 1864.

Notes respecting the Family of Waldo. 8vo (pp. 46). 1864.

(15.) By the SMITHSONIAN INSTITUTION, Washington, U.S. America. Annual Report of the Smithsonian Institution for 1862. 8vo. Washington, 1863.

Smithsonian Contributions to Knowledge. Vol. xiii. 4to. Washington, 1864.

Smithsonian Miscellaneous Collections. Vol. v. 8vo. Washington, 1864.

There was exhibited to the Meeting—

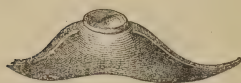


Fig. 3.

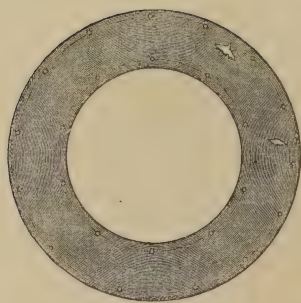


Fig. 1.

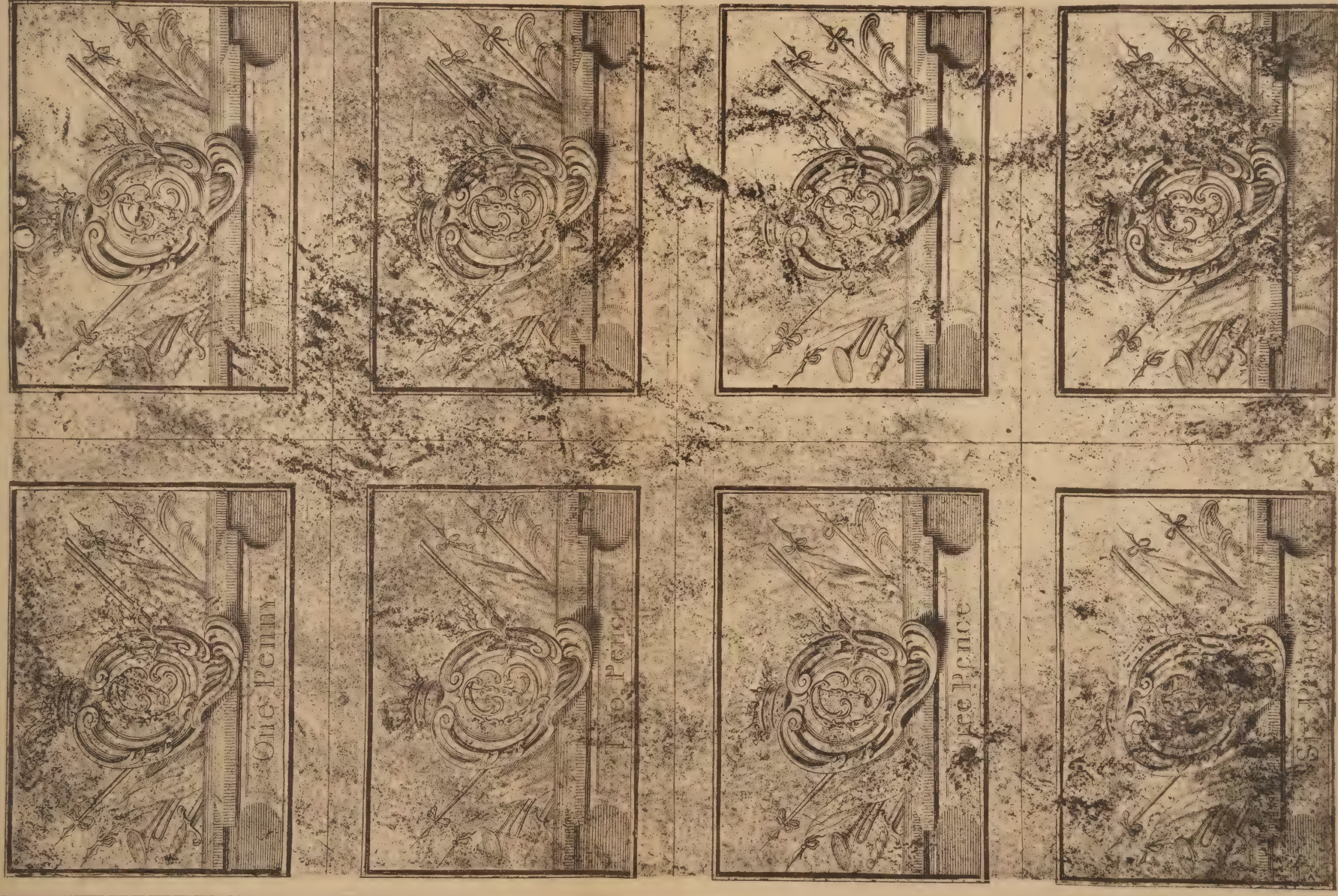


Fig. 2.

Bronze Ornaments, found in a bog at Benibhrea, in Lochaber, Inverness-shire.

(1.) By CLUNY MACPHERSON of Cluny, Esq., through JOHN STUART, Esq., Sec. S.A. Scot.

Three Bronze Ornaments: one, a belt of bronze of a circular shape (fig. 1); another, a horse-shoe shaped belt (fig. 2); and the third, a cup-



IMPRESSION FROM AN ENGRAVED PLATE FOR PRINTING PAPER MONEY,
found near the West end of Loch Laggan, Inverness-shire.

shaped ornament (fig. 3). They were found together under 6 feet of moss on the hill of Benibhrea, in Lochaber, and are well shown in the accompanying woodcuts. Also,

An Engraved Copper Plate for printing paper money, found some years ago near the west end of Loch Laggan, Inverness-shire.

The Bronze Ornaments referred to above consist: First, of a circular piece or band of bronze plate (fig. 1), measuring 13 inches across its greatest diameter, in the centre of which is an aperture 8 inches in diameter. Traces of a minute vandyke pattern remain along its outer edge. Second, of a horse-shoe shaped plate of bronze (fig. 2), measuring in its greatest length 2 feet 1 inch; the greatest breadth of the belt or plate is at the top or head of the horse shoe, where it measures $3\frac{1}{4}$ inches across, and from this part it tapers to the lower extremities, which are $1\frac{3}{4}$ inch in breadth, and are ornamented by a small vandyke pattern; they are cut in a slightly sloping direction from within outwards, and when placed against the circumference of the circular part are found exactly to coincide. Third, an oblong cup-shaped ornament (fig. 3), 8 inches in its greatest length, by 4 inches in breadth, and $1\frac{1}{2}$ inch in depth.

It has been supposed that the horse-shoe ornament was placed above the circular plate, and both formed the ornaments of an oblong-shaped shield of wood; the cup-shaped portion being the oblong boss of the shield, which was probably placed in the open part of the horse-shoe plate.

The Plate of Engraved Copper also exhibited measures 9 inches square, and on it are engraved various small oblong Notes, showing they were probably intended to have formed Paper Money for the use of the army of Prince Charles Edward Stuart. The Notes are for various small sums of one penny, twopence, threepence, and sixpence. The plate is supposed to have been lost in the flight after the battle of Culloden, in the year 1746. It is believed to have been engraved by Sir Robert Strange, who was with the army. An impression taken from the plate itself is given in Plate V.

(See "Note of a Copper Plate and Bronze Ornaments," by Mr John Stuart).

(2.) By ARTHUR MITCHELL, M.D., Corr. Mem. S.A. Scot.

Stone Mould, in two portions, for casting spear-heads. Also,

Another Stone Mould, in two portions, for spear-heads, both sides being cut for moulds). They were found while breaking up old land, near Campbelton, in Kintyre, Argyleshire, along with them on the same spot were found two stone celts (Plate VI. figs. 4, 5).

The first of these moulds is of dark-coloured stone (serpentine), and is for casting spear-heads, with open loop at the neck (Plate VI. fig. 3). It measures 7 inches in length by $1\frac{3}{4}$ inch in breadth.

The second stone mould, also of a dark-coloured serpentine, is cut on both sides so as to form moulds for two spear-heads (Plate VI. figs. 1, 2) the one, of a ruder character, being on the opposite sides of the stones. It measures $4\frac{1}{2}$ inches in length by 2 inches at one end, tapering to 1 inch at the other. The two sides of this mould are not alike, as in the one first described; in this case one side has the shape of the spear-head deeply cut into the stone, so as to include the whole thickness of the edge of the spear, and the other side has simply the mid-rib alone cut on it, and the rest of that side of the mould is gently bevelled towards the edges, the result of which simple plan is, that when the two sides are laid together, a perfect mould is made, the two sides of the casting being almost exactly alike—and the spear-head is perfect in both its sides; less labour being thus required in forming an outline exactly alike on both sides of the stone mould, and the result being equally satisfactory.

The Stone Celts (figs. 4, 5) found along with the mould are formed of a dark-coloured compact clay iron-stone; they are polished to a smooth surface, and measure respectively—the one, 7 inches long by 3 across the face; the other, $3\frac{1}{2}$ by $2\frac{1}{2}$ inches.

The moulds are well shown in the accompanying Plate VI. figs. 1, 2, 3, drawn to half their size; and the celts to one-third of their size (figs. 4, 5).

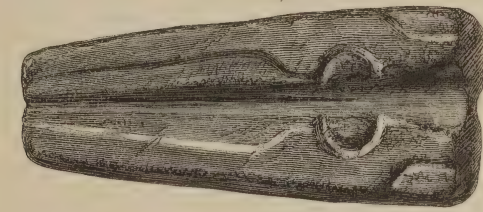
The following Communications were read :—



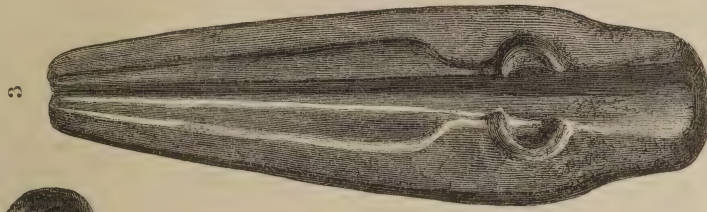
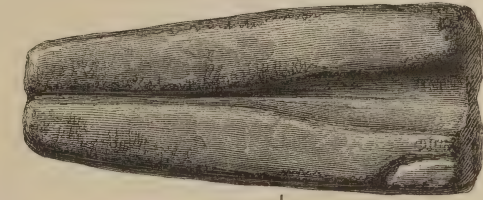
6½ inches in length.



5½ inches in length.



4½ inches in length.



7 inches in length.

TWO STONE MOULDS FOR SPEAR HEADS, &c., AND TWO STONE CELTS, ALL FOUND TOGETHER NEAR CAMPBELTOWN, ARGYLSHIRE.

1. Mould.

2. Reverse of one of the halves of No. 1.

3. Half of the larger Mould.

4, 5. Celts.

I.

NOTICE RESPECTING THE MONUMENT OF THE REGENT EARL OF MURRAY, NOW RESTORED, WITHIN THE CHURCH OF ST GILES, EDINBURGH. BY DAVID LAING, ESQ., FOR. SEC. S.A. SCOT. (PLATE VII.)

Lord James Stewart, Prior of St Andrews, created Earl of Murray¹ in 1562, and afterwards Regent of Scotland, was, it is well known, assassinated by Hamilton of Bothwellhaugh in the streets of Linlithgow, during his progress to Edinburgh on the 23d January 1569–70.² The Regent's body was brought to Edinburgh, and his funeral took place on Tuesday the 14th February, in the south aisle of the great kirk of St Giles, Edinburgh. On this occasion Knox preached a sermon from the words "Blessed are those who die in the Lord." It was delivered in the presence of many of the nobility, and of such a concourse of people, that Calderwood says, "He moved three thousand persons to shed teares for the losse of such a good and godlie Governour."

Immediately above the vault where the Regent was interred a public monument, in the form of an altar-tomb, was erected, with an engraved brass-plate, containing a Latin inscription, written by George Buchanan. This part of the building was the transept of the church, and seems to have remained as an open thoroughfare for nearly two hundred years. But there are no old ground-plans from which we can ascertain the changes that were made in this part of the interior of the building during the last century, at the time it was converted into a parish church. It was, however, reserved for the last unfortunate remodelling of the entire building to have such monuments cleared away as encumbrances, without regard either to historical associations or family rights. The destruction of the Regent's Monument was, in truth, to use plain words,

¹ The comparatively modern fashion of spelling the name Stuart and Moray were probably adopted from the French, or from Buchanan's Latinised form, but the Regent himself uniformly wrote his name Stewart and Murray.

² See Postscript at p. 54.

a disgrace to Edinburgh; but the brass-plate, being regarded as a curious piece of antiquity, was fortunately saved from the melting-pot, and after a time was restored to the family.

In the year 1840 the propriety of restoring this brass to the walls of the church had been brought before the Town Council, upon the recommendation of this Society. A memorial upon the subject was again presented to the Lord Provost and Magistrates in 1853. The proposal was favourably enough received, but the question of expense, and the want of any correct representation of the monument itself, seemed to present formidable obstacles to its restoration.

The brass itself was exhibited to the Society in May 1853, and at the time the late Mr W. H. Lizars having succeeded in taking not a mere rubbing, but in fact a copperplate impression, which could be transferred to stone, the full size of the engraved plate, I was at the expense of having copies thrown off for private distribution, as the surest mode of preserving its appearance in case of any accident happening to the original brass. Of this facsimile a very accurate reduced copy is given in the Society's Proceedings, vol. i. p. 196.

About two years ago, whilst engaged in preparing for the Society Notes relating to the Antiquities of Edinburgh, I was favoured by Mr Forbes Skene with the use of a large collection of sketches and drawings connected with Edinburgh and its vicinity, made by his father, the late James Skene of Rubislaw, Esq., in the early part of this century. Among these I was happy to find one which exhibited the interior of the "Old Kirk," with the monument in question. This appeared to furnish a good excuse for renewing the scheme for the restoration of the Monument; and having submitted, through John Phillips, Esq., the sketch to the Earl of Moray, his Lordship, with a becoming regard to the memory of his distinguished ancestor, not only expressed his readiness to give the original brass, but authorised the monument to be reconstructed at his own expense, with as near an approach to its first design as possible.

To allow of this proposed restoration, the Ecclesiastical Commissioners, and also the Minister and kirk-session (through Baillie Cassells) permitted a few steps to be removed, and a side door that was seldom made use of to be closed. The restoration has now been happily accomplished from a design and under the direction of David Cousin, Esq., city

architect, executed by Mr John Rhind, sculptor (see Plate VII. at p. 54); and the old Brass, after several adventures, again occupies its original position on the wall of the church.¹

In the examination of the vault which took place in the year 1850, as described in the Proceedings, vol. i. p. 194, three coffins were discovered. The Earl of Moray having expressed a wish that a careful examination of the vault should again be made, as it was not improbable that the form of the vault might have been changed, and some other remains might still be discovered, more especially with the view of identifying the remains of the Regent. After a good deal of labour was expended for this purpose, as nothing further could be ascertained, it was suggested, that the oldest leaden coffin should be brought up from its narrow enclosure and opened in the presence of one or two of the medical professors, as the surest mode left to identify whether it was actually that of the Regent. But the Earl of Moray thought this proceeding unnecessary. From the mode, however, in which the three coffins are now placed, any such examination may afterwards be more easily accomplished.

But I am not yet done with the Brass and the old Monument. In examining the family papers in the charter-room of Donnybristle, the Earl of Moray discovered a detached sheet without name or date, endorsed "The Compt of Geir furnisit to my L. Buriall." It was shown to me by John Phillipps, Esq., his Lordship's Commissioner, in order to ascertain its precise date. From internal evidence it clearly refers to the Regent's funeral, in 1569-70, and is in a contemporary hand. With his Lordship's permission I had it transcribed, and a copy of it is here inserted. It is indeed a very interesting document, and furnishes us with the names of John Roytel² and Murdoch Valker as the masons who constructed the place of sepulture, at the expense of L.133, 6s. 8d.; and of James Gray, goldsmith, who engraved the brass plate, at the charge of L.20; while the same plate of brass (which then was rather a scarce commodity) was bought from David Rowane for L.7.

¹ Mr Cousin's Working Drawing was exhibited to the meeting.

² Roytel was probably the son of Nȳcolas Roytell, a Frenchman, appointed the king's master mason 22d April 1539. His own name appears as such in the Treasurer's Accounts in 1579.

“THE COMPT OF GEIR FURNISIT TO MY L. BURIALL.”

Item, vpoun the xxvi day of Januar 1569 deliuerit to Maister Jhone Wod, for to transport the geir that was in my Lordis luidgen in Edinbur ^t ,	xxiiii li.
Item, gaif the same tym, to my Lordis buriall for four ellis zallow tauffateis, to be banaris, at xxiiii s. the aell summa,	iii li. xvi s.
Item, for vi ellis zallow and blak bukrame at vii s. vj d. the aell summa,	xlvi s.
Item, gaif to Villiame Harlay saidlair, to be fwytmantillis ¹ to Grange hors and the Lard of Cleischis, for the dwll ² v ellis blak stemmyng at lvi s. the aell summa,	xiiii li.
Item, to the herauldis xxxvi aellis blak tauffateis to cover thair coit of armes at xxiiii s. the ell summa,	xlvi li. iiii s.
Item, for vi quarteris of craipe to Grangis dwll,	xxvii s.
Item, for iii½ ellis blak stemmyng ³ to be ane buriall cleyth vpoun my Lordis beir pryce of the aell iii li. summa,	x li. x s.
Item, for ane paper of preynis to buisk ⁴ the herauldis,	xvi d.
Item, the same tyme to Peir Antuene and the Meir ⁵ at their departing to France for the hattis pryce,	v li. ii s.
Item, for iii½ ellis Franche russat to be the Meir ane klok coit and ane pair of gargasis—pryce of the aell xl s. summa,	ix li.
Item, for to be ane doublat of Poldowy ⁶ to the Meir and lynying of his gargasis,	xv s. viii d.
Item, for thre ellis blak stemming to be Peir ane klok coit and ane pair of gargasis at iii li. the aell summa,	ix li.
Item, for cammes to be ane doublat and lynyngis to his hois, xxxiii s.	xi d.
Item, for heir to buis thair cleis and gargasis,	xv s.
Item, growgrane ⁷ versettis to be cannonnis to their hois,	xvi s.

¹ Footmantles.

² Dule, or mourning habit.

³ A kind of woollen cloth.

⁴ Pins to dress.

⁵ A Moor, or the black servant and a dwarf, who formed part of the Regent's household.

⁶ Poldowy, or Poledavy, a coarse cloth or canvass.

⁷ The English *grograin*, a coarse kind of silk taffety.

Item, for Peir Antueyne and the Moris buirdis in Jhone Mych Cullowis fra the xxvii day of Januar 1569 to the xxvi. of Aprill thairafter ilk day vii s. summa,	xxx li.
Item, for thair fraucht and victualis frome Leyth to Deipe in France,	xvi li.
Item, gaif to thame in Deipe at thair landing xl frankis extending to,	xxx li.
Item, for iii pair schone ¹ to thame at thair departing,	x s.
Item, gaif to Jhone Ryotaill and Mwrdoche Valkar measounis for the making of my Lordis sepulture according to the inden- tour maid betuix vmquhill Maister Jhone Wod ² and thame,	i ^c xxxiii li. vi s. viii d.
Item, to James Gray goldsmyth for ingraving of ane platt of bras vpoun my Lordis sepulture,	xx li.
Item, to David Rowane for the same platt of bras,	vii li.
Item, for varnising of the same plaitt and putting vpe and fixing thairof,	iiii li.
Item, to the payntour for bleking of the sepulture and his paynis,	xx s.
Item, for the len ³ of certane daillis to be ane vaill the tyme of the building of the sepulture,	xl s.
⁴ Lateris iii ^c lxxi li. iii s. i. d. (£371, 4s. 1d.)	

When the brass was exhibited to the Society at a meeting in May 1853, it was pointed out by Dr D. Wilson that the half of an older engraved brass plate had been employed. (See vol. i. p. 181.) If any opportunity should occur for examining the similar brass at Ormiston, evidently engraved by the same hand (see vol. iv. p. 225), we might possibly find on the reverse the remaining portion of the two figures with the rest of the inscription which contained the names and date.

In order to fill up the vacant space in the centre of the restored monu-

¹ Shoes.

² Umquhil (the late) Mr John Wood of Tilliedavy, in Fife, the Regent's confidential Secretary. He was murdered during the short interval that elapsed between the time of this funeral and the making up these accounts. (See Knox's Works, vol. vi. p. 560, *note*.)

³ Loan.

⁴ The whole of the original is written on one page or side. The "Item" in the first line shows that it is only a portion of the account.

ment, Mr Cousin has introduced an ornamental scroll tablet, surmounted by the family crest, with this simple inscription :—

ERECTED
BY HIS COUNTRY
TO
JAMES, EARL OF MURRAY,
REGENT OF SCOTLAND,
ANNO DOM. MDLXX.

RESTORED
BY
JOHN, 12TH EARL OF MORAY,
ANNO DOM. MDCCCLXIV.

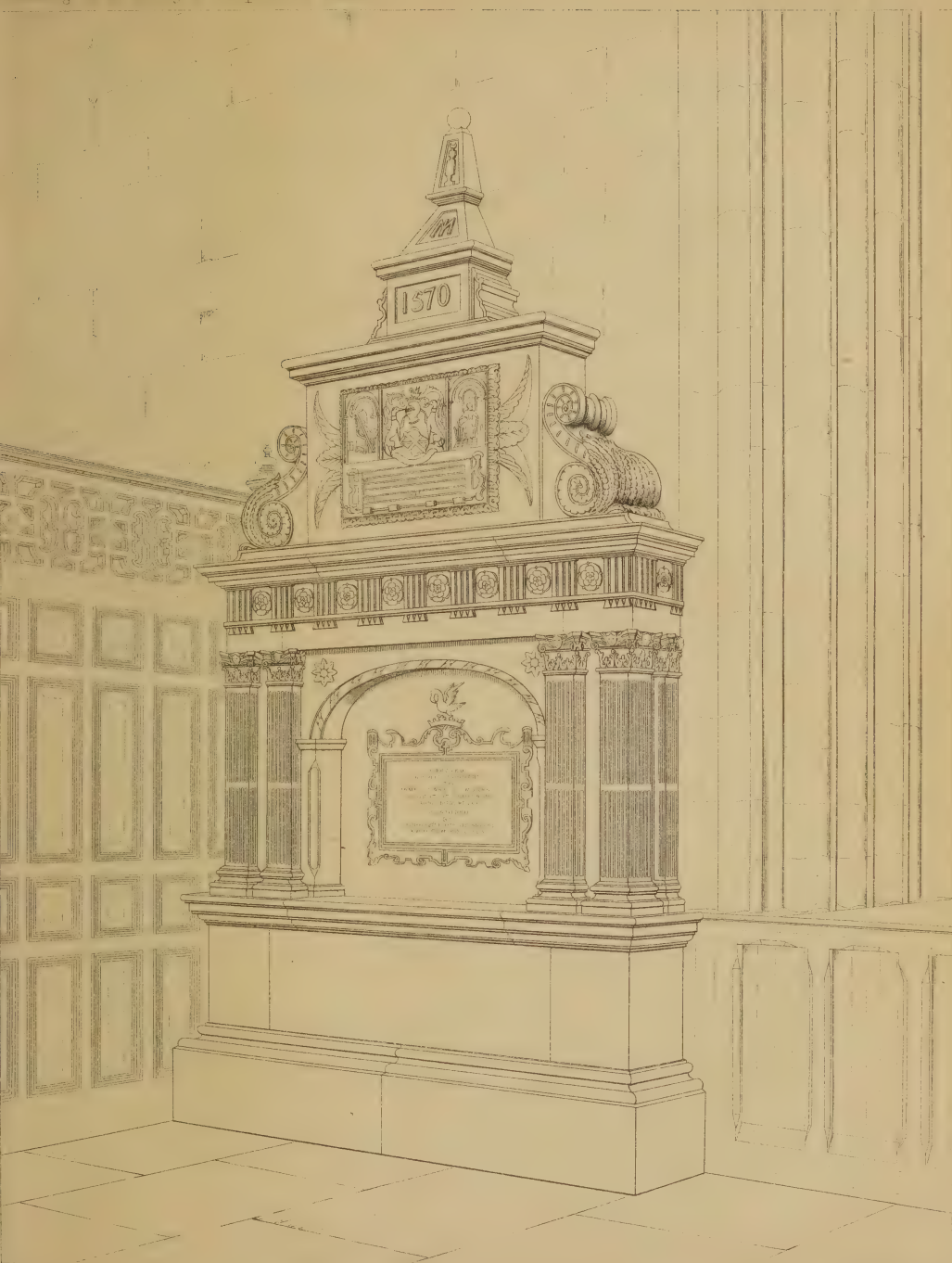
In conclusion, I have to express my thanks to Mr Forbes Skene for again permitting me to exhibit to this meeting the volume of his Father's drawings which contains the Regent's Monument. I think, also, the members of the Society and the inhabitants of Edinburgh are under a debt of peculiar obligation to the Right Hon. the EARL OF MORAY for having thus restored, in a satisfactory manner, this public Monument.

The thanks of the Meeting were voted to the Earl of Moray for the satisfactory restoration of his ancestor's monument; and to Mr Laing for the interest which he has taken in this matter for a long time, and for his present communication.

P.S.—Without entering upon minute details of family connexions,¹ the following note may be added in reference to the mention that occurs at page 49, respecting the murder of the Regent Earl of Murray.

Mr Tytler in his history, where he describes the tragical scene at Linlithgow, says, "But Bellenden the Justice-Clerk, a favourite of Moray's, who had obtained a grant of the escheats (of the forfeited property of Woodhouselee), violently occupied the house, and barbarously turned its mistress, during a bitterly cold night, and almost in a state of nakedness, into the woods, where she was found in the morning furiously

¹ See Anderson's House of Hamilton, p. 240.



mad, and insensible to the injury which had been inflicted on her. If ever," he adds, "revenge could meet with sympathy, it should be in so atrocious a case as this," &c. The same story is detailed by Sir Walter Scott, and other writers; and, no doubt, forms a very romantic episode, but *it is neither more nor less than a pure fiction*. It can be proved, from authentic evidence, that Woodhouselee was previously conveyed to Sir John Bellenden by his relative James Hamilton of Bothwellhaugh himself, with consent of his wife, for the express purpose of preventing forfeiture; that she never suffered any such outrage; and that she survived for upwards of forty years the date of the alleged event. For enabling me to state this with greater confidence, I am indebted to information communicated by James Maidment, Esq., advocate. Bothwellhaugh was one of those desperate characters who acted as the hired assassin of the Hamilton faction; private revenge having no influence in the matter.—D. L.

II.

ACCOUNT OF GRAVES RECENTLY DISCOVERED AT HARTLAW, ON THE FARM OF WESTRUTHER MAINS. WITH DRAWINGS BY THE LADY JOHN SCOTT. BY JOHN STUART, ESQ., SEC. S.A. SCOT. (PLATE VIII.)

On the summit of a rising ground, called Hartlaw, on the farm of Westruther Mains, part of the estate of Spottiswoode, are two gravel knolls of no great prominence, adjoining each other. The site commands an extensive prospect on all sides. On the south are the Cheviots, the Eildons, Hume Castle, and Mellerstane. On the west are Boone Hill and the hills on Gala Water. On the north are the Lammermoor Hills, and prominently the Twinlaw Cairns, which is the highest point on their south ridge; and on the east, Dirrington Law and Langton Edge.

The two knolls (see Plate VIII. figs. A and B) were lately excavated by orders of Lady John Scott, and the work was done under her inspection. That on the south (B) was found to be a natural formation of gravel with a subsoil of sand. On its north side, part of a surrounding circular wall or foundation was laid bare, formed of small slabs set on edge in the ground. In one place the circle described by this outer wall measured 24 yards across. No traces of it were discovered on the south,

and little on the east side of the knoll; but it is probable that the stones may have been disturbed by the plough in these parts, as they were found immediately below the surface. Within this external wall vestiges of walls, forming smaller enclosures, were noticed, very irregular and undefined in shape, but with a tendency to a circular or oval form. Some of them were about 6 feet across.

About the centre of the knoll a round pit was found about 2 feet deep, and less than that in diameter, lined with stones, the mouth being formed of small slabs like those of which the inclosures were made. This pit was filled with charred wood and burnt matter.

Small holes formed of stones on edge within the interior enclosures were also filled with charred wood, which also occurred occasionally elsewhere in small portions mixed with the soil.

Two graves formed of stone slabs on edge were found on the south side of the knoll. They were in the direction of east and west, with the head to the west. They were not paved in the bottom, and charred wood was found in and around the coffins, which were of full length.

In the other knoll (A) many graves appeared, fourteen of which were uncovered. They were formed of small stone slabs, with which they were also paved in the bottom and covered above. In the course of digging, the site of a grave was always to be detected by the occurrence of charred wood in the surrounding soil. On opening the graves, ashes of wood were generally found in the centre, and in some cases towards the head, mixed with the soil with which they were filled. In some of the graves portions of human remains were found, generally the portions at the west end, and in some cases the bones appeared very fresh. The coffins were laid east and west, with the head to the west. Their average length was about 6 feet; but I measured one which was 6 feet 8 inches, and others which were respectively 5 feet, 3 feet 10 inches, and 4 feet 6 inches.

On the north-east side of this knoll were two pits like wells, and near the south are portions of a curving wall, which was only traceable for a short way. One of the pits was deeper than the other. It was lined with stones, and the mouth was formed of slabs on edge like the walls. It was about 15 inches across, and 2 feet deep. It was filled with charred wood and slaky earth, and portions of black matter had penetrated below and outside the well, as if it had escaped when in a liquid state.

The site of the graves, and the appearance of the remains of the walls and pits, will be understood from the accompanying sketches made by Lady John Scott (see Plate VIII.) The general appearance of the knolls appears from the plan (exhibited) made by Mr Spottiswoode.

Portions of the bones, charred wood, and greasy earth, are also produced.

The graves in question may be compared with the cists at Clocharie in the same neighbourhood, excavated by Lady John Scott, and described at one of our meetings of last session. In this case three short cists were found, which had been covered by a cairn. One of these contained a large urn inverted on a slab, filled with incinerated bones and ashes of wood. The other cists also contained burned bones and ashes, but no urns. In the centre of the space covered by the cairn a large pit was found, containing ashes of wood and unctuous earth.

In an adjoining knoll another pit was found, containing a large quantity of charred wood and unctuous matter, and in three spots deposits of ashes and bones were found, and in different places two flint implements, three or four stone celts and round pebbles; and in both knolls many foundations formed of slabs set on end in the ground, like those at Hartlaw, some of which enclosed small spaces, were found.

There was a resemblance between Clocharie and Hartlaw in regard to the occurrence of pits containing burnt matter and foundations of walls; but they differ in that the cists at Clocharie were short, and contained an urn and burned bones, with flint and stone implements near them, while the graves at Hartlaw were long, of a uniform disposition east and west, and contained no relics and no burned bones.

The latter have more the appearance of being the graves of Christians, like those of the Anglo-Saxons, which for a time seem to have been placed in groups in spots not yet attached to the church, although the consecrated cemetery around the church was from the earliest period the idea to be aimed at. We may gather from a capitulary of Charlemagne, what would occur to us as likely in itself, that for a time the converts to the new faith preferred the burial places of their forefathers. "*Jubemus ut corpora Christianorum Saxonum ad cœmeteria Ecclesiæ deferantur et non ad tumulos paganorum.*"¹

¹ Walter's "*Corpus Juris Germanici Antiqui*," vol. ii. p. 107.

In several cairns which I have recently examined, the traces of burning were very marked, as in the cairn of Clocharie; but in these cases the occurrence of calcined bones in urns is sufficient to account for such traces, at least to some extent.

A careful investigation of our early sepulchral remains seems to show that at one time the burning of the body had been all but universal.

The burning of the body was confined to the pagan system, and the custom was denounced by the Christian missionaries. One of Charlemagne's capitularies makes the act a capital offence. "*Si quis corpus defuncti hominis secundum ritum paganorum flamma consumi fecerit, et ossa ejus ad cinerem redegerit, capite punietur.*"¹

But in some cases, as at Hartlaw, there are many traces of burning, where the body does not appear to have been burned.

And in others where the body *was* burned, there are found, in addition to the vestiges of burning which that act would require, great quantities of the bones of animals, such as those of the ox, sheep, and horse.

Many such remains were found in a group of twenty cists, containing unburned human remains at Haly Hill, near St Andrews, along with flint flakes, a broken celt, and other remains. At Law Park, on the opposite side of the Kinness Burn, a group of eighteen large urns, part of a more extensive series, were found. The urns were filled with burned bones, and in one of them two small bronze knives. Among the urns large quantities of the teeth of oxen and sheep, with cores of their horns, were found.

Some long stone cists were recently discovered in and about the ruined chapel on the Kirkheugh of St Andrews, which was the site of an early Culdee settlement there. Among other traces of conformity to the earlier system, I have noted the occurrence of three small circles of sea stones, and within them fragments of charred wood, with bones and teeth of boars, horses, and oxen.

Great quantities of horses' teeth and bones of animals were found throughout the great barrow of Maeshowe in Orkney, and such remains are of frequent occurrence about the graves and Pict's houses in that country.

A notice in the confessional of Archbishop Egbert of York, would

¹ "*Corpus Juris Germanici Antiqui.*" vol. ii. p. 106.

seem to shew that the flesh of the horse was an article of food among the early races of Northumbria. "Caro equina non est prohibita, etsi multæ gentes eam comedere nolunt."¹ An opposite rule was laid down at the Synod of Cloveshoe, A.D. 785, where, it is said "Equis etiam plerique in vobis comedunt, quod nullus Christianorum in orientalibus facit, quod etiam evitate."²

The custom of feasting at the graves of the dead seems to have been common in heathen times. One of the Frankish capitularies is directed against it, "Et super eorum tumulos nec manducare nec libere præsumant."³ St Boniface complains that the Christian priests were apt to join in eating the sacrifices of the dead, consisting of the bulls and he-goats which had been offered to the gods of the pagans.⁴ Two provisions of the *Indiculus superstitionum et paganiarum*, in a capitulary of Charlemagne seem to refer to this custom, "De sacrilegio ad sepulchra mortuorum," and "De sacrilegio super defunctos id est dadsisas."⁵

The letter of Pope Gregory to the Abbot Mellitus, preserved by Venerable Bede, refers to the pagan custom of slaying oxen, "in sacrificio dæmonum," and advises that the rite should be changed into Christian feasts, to be held on festival days.

It seems not unreasonable to believe, from the remains found in the cemetery of the Kirkheugh, that the stone cists there mark burials of a transitional character, when the Christian site had been adopted, but the older feasting at the grave was not yet abandoned.

Whether the traces of burning at the Hartlaw are marks of a like character it may not be easy to say—as no bones of animals appeared among the burned débris of the pits—but if we are to conclude from other indicia that the graves were those of Christians of a very early date, it would seem most likely that the traces of burning are in like manner to be accounted for by a continuance of the ancient feasts.

It may be well to record that in the month of November last, a group of nearly forty short cists was discovered on Gallery Knowe, on the

¹ Thorpe's "Ancient Laws and Institutes of England," vol. ii. p. 163.

² Wilkins' "Concilia," tom. i. p. 150.

³ Quoted by Thrupp in his "Anglo Saxon Home," p. 397, et seq.

⁴ Ibid.

⁵ Walter's "Corpus Juris Germanici," tom. ii. p. 54

estate of Newhall, near Yester House. The site had been long under cultivation, but the land having come into Lord Tweeddale's natural possession, the deep ploughing which the soil underwent brought the cists to light. They were examined by Mrs Warrender, who assisted in the exploration of Clocharie, and although they were all in a state of confusion, she could make out that the cists were short (about 3 feet to 4 feet), formed of slabs, with which they were paved in the bottom and covered at the top.

In the cists there was a quantity of blackish earth, similar to the greasy substance of which so much was found at Clocharie, but no bones or relics of any sort appeared. "Some of the cists had a round stone for a cover, evidently wrought with tools, not unlike part of a quern." (Letter from Mrs Warrender to me.)

The cordial thanks of the Meeting were voted to LADY JOHN SCOTT for carrying out the examination of the graves, and for the beautiful drawings which she made to illustrate the description of them.

DESCRIPTION OF PLATE VIII.

(From Sketches by the Lady John Scott.)

*Sketch of two Mounds (A and B) at Hartlaw, Westruther Mains,
Spottiswoode, Berwickshire.*

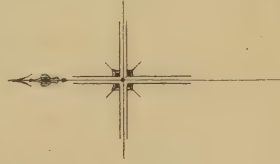
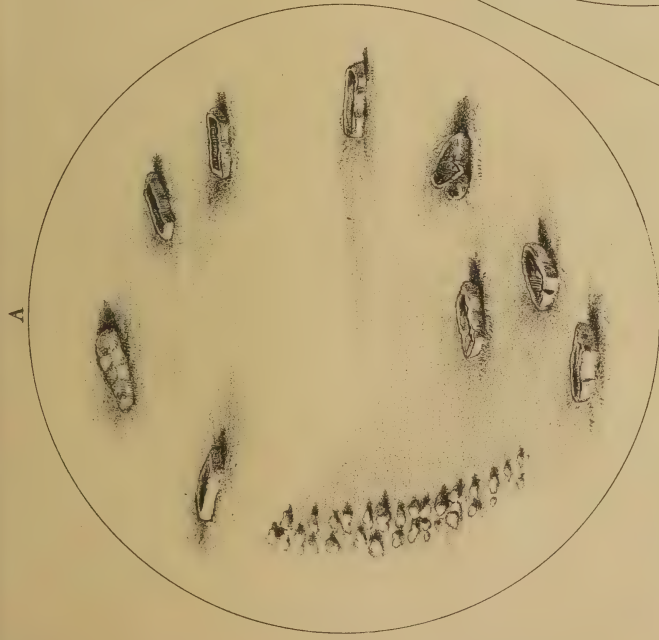
MOUND A,

Showing series of stone cists, curved wall, and pits.

MOUND B.

1. Remains of a large stone circle, stones put in edgewise, from 1 foot to $1\frac{1}{2}$ foot high.
2. Circular hole about 2 feet in diameter, built with stones like a well to the depth of 3 feet, and containing a quantity of charred wood, ashes, and black adhesive matter.
3. Smaller circle of stones, only rather more than half the circle remaining.
4. Circular hole like No. 2, but smaller, and in the semicircle of stones, containing the same stuff as No. 2.
5. Semicircle of stones and clay, about 6 inches high.
6. Foundation of old building, 8 or 9 inches high, of stones.
7. Bit of old building.

TUMULI AT HARTLAW WESTRUTHER MAINS SPOTTISWOODE BERWICKSHIRE.



8. Stone coffin, containing ashes and bones.
9. Do. do.
10. Foundation of building, about 1 foot high.
11. Circular cavity in the foundation, filled with charred wood and ashes.
12. Large circular cavity, filled with charred wood and ashes.

[Mr Stuart, at a subsequent meeting, read the following note connected with this subject :—

18th March 1865.

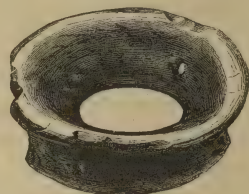
In company with Professor Simpson, Mr Innes, and other friends, I this day examined two graves on the estate of Mortonhall, which Mr Trotter was so good as open up for inspection. They were discovered in a rough dry knoll on the highest point of the Braid Hills, near a little hollow called the Elf Kirk. A third was said to have been found by probing, and I have little doubt that more are placed round the knoll, but only two were opened up. The first was formed of slabs, of which we were told that none are to be found nearer than Limekilns on the one side, and Hailes on the other. The top consisted of several covers of thin slab, of which the bottom and sides were formed. The grave was about five feet ten inches in length, sixteen to eighteen inches wide at the head, and half that at the foot. When it was opened a few days ago, as I learned from Miss Trotter, she observed portions of charred wood in the grave, some of it in the shape of powder, and some in small pieces, which her brother took up and squeezed between his fingers. When the grave was re-opened to-day, we saw the bones of a human skeleton, in tolerable preservation, the skull in fragments, but no relics of any sort.

The second grave seemed to have partly given way and was filled with rubbish, among which portions of human bones appeared. It was constructed in the same way as the first, lay a few yards from it, and was nearly in the same direction, viz., east and west.]

III.

NOTICE OF A LONG-SHAPED CIST, WITH SKELETON, FOUND NEAR YARROW KIRK, SELKIRKSHIRE, FROM COMMUNICATIONS BY THE REV. JAMES RUSSELL, YARROW. BY JOHN ALEX. SMITH, M.D., SEC. S.A. SCOT.

The cist, with its contained skeleton—an account of which I have now to lay before the Society—has an especial interest from the fact of its being found in the immediate neighbourhood of the two ancient unhewn standing stones near Yarrow Kirk; it is also in the very locality, where the large unhewn stone with its Romano-British inscription rudely cut on it, was discovered many years ago, and a notice of it was formerly brought by me before the Society;¹ a cast of the stone being presented to our Museum by our noble President, the Duke of Buccleuch, the proprietor of the lands around. Since that inscribed stone (which apparently formed the cover of an interment) was found, various stone cists have been at different times exposed in the same locality, and the curious ring of cannel coal formerly described, and now in our Museum (see the annexed woodcut), as well as part of a stone hammer, were also found along with them.



Ring of Cannel Coal found near Yarrow Kirk.

The discovery of this cist is detailed in a letter which I received from the Rev. James Russell of Yarrow, and I cannot do better than give his own words.

Mr Russell says:—"One of the Duke of Buccleuch's game-watchers came to me this forenoon to ask what steps should be taken with regard to a sepulchral cist that had been discovered on Saturday evening, near the spot where the others had been found some years ago, and containing a human skeleton. He told me that two servants on Whitehope Farm had seen a rabbit enter a warren, as they thought, and on digging

¹ See Proceedings, vol. ii. p. 484, and vol. iv. p. 524.

it turned out that it had taken up its quarters in the old cist. This, on the upper stones being removed, disclosed the full-length skeleton of a man, the bones mostly in their natural position, though some of the smaller ones had been disturbed by the tiny occupants. I at once went with the game-watcher to the spot, when he and one of those who had made the discovery again removed the covering. The cist is composed of undressed slab stones all round, the bottom being formed like the top, and all carefully fitted to each other. It is about 5 feet 9 inches in length, at the top about 16 inches in breadth, gradually lessening to 12 inches at the bottom. The upper stones forming the lid were only about one foot beneath the surface of the ground; and though the air seems for some time to have had access from the aperture at the end made by the rabbits, the bones are in wonderful preservation. It is exactly similar in character to the other eight cists found here some years ago, and like them lies directly east and west; it is about 25 yards to the south of them, and on the ground which I suggested to the Society of Antiquaries as worthy of being explored. Unfortunately, on Saturday evening, the two men had displaced the bones, and a medical man, who lives near this, and who was passing at the time, had carried off the skull. When I saw the bones, they were collected into a heap. As the story had got abroad, and in case the people in the neighbourhood might disturb them, we had them put into a box, and this deposited under ground near my manse, till they should be carefully examined by an anatomist or antiquary. The skull is very entire, with upper and under jaw; many of the teeth, a good deal worn in the crowns, were in their places, though they soon fell out; the thigh and arm bones, with parts of the spine, are in good preservation. The forehead is somewhat low. I have written to the Duke of Buccleuch (in London, I believe, at present) a statement of these facts, as he takes a deep interest in all antiquities found on his ground, and mentioned that I had communicated also with you."

Mr Russell concludes his letter by kindly inviting the officials of the Society, and any friends who might take an interest in such matters, to come out and make a careful examination of the cist and the whole locality, offering to obtain assistance, and give us the hospitality of his picturesque and comfortable manse. Unfortunately advantage could not

at the time be taken of his kindness, and I wrote to him for more information, and begged he would be good enough to send us the cranium for examination, after steeping it in thin glue to prevent its being broken in its transit. I had a letter in reply, from which I shall also quote :—

“I duly received both your letters, and was sorry to learn from them that neither yourself nor friends could come and examine the cist or its contents. I inclose the answer of the Duke of Buccleuch to my communication mentioning the discovery, and asking what he would wish done with the bones. In accordance with his Grace’s desire, I wrote Dr Anderson to come here, and on his arrival had them taken up from their place of concealment in my garden. He could not make out the sex from the remains that are in preservation, but the skull has all the appearance of being that of a male, and (judging from the thigh bones and size of the cist) one about $5\frac{1}{2}$ feet in height. He thought it best that I should send them in *bodily* to you, with the Duke’s letter, and accordingly painted the head and principal bones with a solution of glue and water. On opening the cist anew, we found nothing save two of the teeth that had dropped out. The bones, after a thorough examination, should be sent back for re-interment, according to the Duke’s desire. Though lying in a closet here, exposed to the action of the air for a week past, till I had the opportunity of sending them safely to Selkirk, they have shown no symptom of decomposition. How are we to explain this? It seems all the more strange, considering that in the adjacent cists previously laid bare, which were in ground equally dry, and were more completely covered up, few remains were found, and these on exposure immediately crumbled into dust. In the present instance, could any process of embalming have been adopted, or has the interment been simply of more recent date than the others? When did the custom of burying in cists cease? Such are some of the inquiries which naturally suggest themselves, and on which, I trust, you will be able to throw some light.”

As the letter of our President has been sent to me, and shows the interest His Grace takes in these matters, as well as gives an opinion on the proper respect to be shown to all such remains, which Antiquaries, I fear, are too often apt to overlook, I shall take the liberty of reading it :—

"LONDON, *July* 21, 1864.

"MY DEAR SIR,—On my return to London last night I found your letter of the 18th, giving an account of the discovery of an ancient sepulchral cist to the west of your manse. From the circumstance that it lies directly east and west, it is probably the grave of some Christian, whose friends would little dream that his remains would be disturbed by rabbits or by man. You have done quite right in at once informing the Secretary of the Antiquarian Society of this discovery, in case he should wish to visit the spot and examine the remains. Should he wish to have a cast of the skull he is most welcome, and if he wishes very particularly to place the skull in the Museum, I do not object; but I think in most such cases it is as well to rebury the bones, for I have as much reverence for the ashes of those buried 1300 years as I have for those that have been buried at a recent period, and have as much regret in disturbing their remains. This instance is curious as to the bones remaining sound instead of crumbling into dust, and information may be derived from it. Dr Anderson would be interested, and it would be well that he should have an opportunity of examining the bones. A correct drawing and measurement should be made of the cist and of the various stones comprising it, as well as a record kept of the circumstances under which it was discovered.—I remain, my dear Sir, yours very sincerely,

"BUCCLEUCH.

"The Rev. James Russell."

The cranium and some of the bones are now on the table, and with the valuable assistance of my friend Mr William Turner, M.B., Demonstrator of Anatomy in the University, the whole have been subjected to a careful examination.

The cranium, though rather small, is well formed, and the various regions are fairly proportioned to each other; the parietal bones are flattened in the posterior half of the region, but the supra-spinous portion of the occipital bone is well rounded.

The skull has an extreme length of 7·2 in., an extreme parietal breadth of 5·2 in., and a height of 4·7 in.—the ratio of length to breadth being 100 to 72, and of length to height 100 to 65. It belongs therefore to the class of long-shaped or dolicocephalic skulls.

Its longitudinal arc, measured from the root of the nose to the posterior edge of the foramen magnum, consists of a frontal arc 4·7 in., a parietal arc of 5 in., and an occipital arc of 4·6 = 14·3 in. Extreme frontal breadth 4·4 in., occipital breadth 4·3 in. Its horizontal circumference is 20·4 in.

The radii of the skull—which give the size or greatest length of its different regions, are measured from the external meatus of the ear to the greatest projection of each region, and are therefore interesting, as showing the relative extent of each—are as follows:—Maxillary radius, 3·8 in.; fronto-nasal radius, 3·6 in.; frontal radius, 4·3 in.; parietal radius, 4·5 in.; occipital radius, 4·1 in.

The length of the face is 4 in., and the breadth at the zygoma 5 in. There are alveolar sockets for the 32 permanent teeth.

The lower jaw is well formed, though rather slender, with square-shaped projection in the middle of the base, and the depth from condyle to angle of jaw is 2·2 in.

The internal capacity of the skull was taken by carefully filling it with glassmaker's sand, having previously stuffed the orbits with wool; the sand was then poured into a glass measure, graduated to inches and parts of an inch, and the cubic capacity was in this way found to amount to 83 cubic inches. The average capacity of modern British crania has not yet been determined on a large scale with very great precision, but Mr Turner informs me that "the mean of 30 normal male German crania measured by Welcker was 88·4 cubic inches; mean of 30 female, 79·3 cubic inches. The mean of 20 male German crania, measured by Huschke, was 88·17 cubic inches; of 17 female German crania, 79·3 cubic inches." This skull, therefore, gives a capacity somewhat below that of average modern male German crania, but still considerably above that of the females, and it falls below the mean capacity of the crania from the long barrows recorded by the authors of the "*Crania Britannica*."

The skeleton is of moderate size, the femur measuring 17 inches in length; the humerus 12·5, the radius 9, and the ulna $9\frac{7}{8}$ inches. The extreme length of the body of the scapula being 5·8, and the breadth opposite the attachment of the spine 3·8 inches. I need not enter into any other details, but shall only state that the bones seem to be those

of an adult male of rather moderate stature and of fairly developed muscular power.

In looking over the various bones, I was struck by the appearance of a peculiar tubercle-like process projecting upwards and inwards from the upper surface of the first rib of the right side, the left being quite natural. This is of very rare occurrence, and is believed by anatomists, from a careful study and comparison of the several and varying cases which have been observed, to be an indication of a cervical rib,—a rib arising from the seventh or last cervical vertebra. The Museum of Anatomy in the University here possesses no less than three or four specimens of this rare variety in different degrees of development—one shows the free head of the rib, and the attachment of its body to the first true rib of the chest; and others show varieties, in size and shape, of this tubercle-like process. Its occasional presence is curious and suggestive, in an anatomical point of view, of the relation or analogy of the transverse processes of the vertebræ to the ribs; and it is also interesting to find such a rare peculiarity occurring in the occupant of one of our early cists. From the rarity of the occurrence of this peculiarity and its anatomical interest, I have added the specimen to the Anatomical Museum of the University.

With regard to the queries in the Rev. Mr Russell's letter as to the cause of the excellent preservation of the bones, and the period when burial in cists of this kind was given up, I shall be glad to hear the remarks of the members.

The former I suppose to be due perhaps to their more recent date, and they would therefore show the long-continued use of the ground beside the old standing stones, as a place of burial; or simply to their higher position in the dry bed, in which the bones were laid—the animal matter of the bones has, however, been all, or almost all, removed. I am not able to answer the latter query in a definite manner, as it apparently has extended over a very lengthened period of time, from the days of the earliest inhabitants of the country with their short stone cists, down to comparatively recent times. It appears to be very difficult to judge whether any of these early interments are Christian in their character, simply because the cists happen to lie east and west, as many exactly similar ones are laid in very varying relations to the cardinal

points; indeed, this rule would not even agree with our modern interments, at least in the neighbourhood of Edinburgh, as we find in our newer cemeteries the graves are laid indiscriminately in every different position, from east and west to north and south, according to the slope of the ground, or the plan upon which the mere subdivisions of the burying-ground are laid out.

The presence among these Yarrow cists of the inscribed stone with its Romano-British inscription—and of the ring and stone hammer—would, however, seem to take us back to a comparatively early period, to times not very long posterior, shall I say, to the last Roman occupation of the country.

Some time after this paper was read to the Society, the bones were returned for re-interment to the Rev. Mr Russell of Yarrow, and in a letter received from him acknowledging their safe arrival, he refers again to the question of their state of comparative preservation, as compared with those found in the adjoining cists; and as he believes he has now got at the true causes of this difference, and the subject is one of considerable interest, I think it right to add an extract from his letter to this communication. Mr Russell states:—

“The box, with the sepulchral remains, reached me safely. They were not in the very slightest degree injured by their long carriage to and from Edinburgh, and have been carefully restored to their former resting-place.

“I have been occasionally considering the questions to which your attention was invited. My first impression was, that their hard and tangible state might perhaps be ascribed to the somewhat peaty nature of the soil. The preservative qualities of moss are well known. On Berrybush, a farm in my parish, the body of a suicide was dug up in a moss, where, according to tradition, it had been hastily buried—the person, clothing, even the hay rope with which the rash act was committed, being fresh as yesterday, after the lapse of more than a century. The circumstances have been minutely described in a letter published in “Blackwood’s Magazine” for August 1823, and furnished the groundwork of a tale by the Ettrick Shepherd, entitled ‘Confessions of a Fanatic.’ Now, the scene of the present disinterment was formerly a

waste undulating moor, from which feal and divot had for a long period been taken, and in certain hollow portions of which, peat three or four feet deep was cast at no distant date. Had the bones in question been imbedded in any of these low damp spots, their preservation from decay would have been at once accounted for. But seeing they were discovered on a dry and elevated slope, and were carefully protected by the slab stones that enclosed them, it cannot possibly be due to the nature of the soil; and besides, this theory fails to explain how the remains in one cist should be so numerous and entire, while in all the others alongside of it, the few bones that were met with should almost immediately have become a heap of dust.

"I am now able, as I think, satisfactorily to solve the difficulty. In recently reading 'Rawlinson's Ancient Monarchies,' I was much interested by the description of the tomb-mounds formed by the early Chaldæans, the most remarkable feature of which is the system of drainage. By the effectual arrangements adopted, it is stated that 'the piles have been kept perfectly dry; and the consequence is, the preservation, to the present day, not only of the utensils and ornaments placed in the tombs, but of the very skeletons themselves, which are seen perfect on opening a tomb, though they crumble to dust at the first touch' (vol. i. 114). We are told, however, in a footnote, that this latter statement is qualified by Mr Taylor, who has done so much in the work of disinterment. 'Directly on opening these covers,' he says, 'were I to attempt to touch the skulls or bones, they would fall into dust almost immediately; but I found, on exposing them for a few days to the air, that they became quite hard, and could be handled with impunity.'

"Here, then, we have an explanation of the comparatively perfect state of the recently discovered skeleton. The cist, as has been stated, was on dry and sloping ground, and, though near, lay sufficiently beneath the surface to have prevented any injury from rain. The widening of the public road, about thirty years ago, had left its lower end all but uncovered, and thus, it would seem, partially subjected it to atmospheric influence. Judging from the disturbance of the remains, and the comfortable lair at the other extremity, the rabbit had for some time been the occupant of the strange retreat, and the small opening among the slabs by which it entered had admitted the air still more freely. The

very circumstance, therefore, which I had fancied would have tended to decompose the bones, has been the secret of their compactness and durability, and readily accounts for a result which the exposure of only a few days produced on the greatly more ancient relics of Chaldæa."

The thanks of the Meeting were voted to the Duke of Buccleuch for his interest in the preservation of this and other early remains on his lands, and for his desire to make the discovery subservient to the purposes of the Society; also to the Rev. Mr Russell for his careful notices of the discovery.

IV.

OBSERVATIONS ON SOME OF THE RUNIC INSCRIPTIONS AT MAESHOWE, ORKNEY. BY RALPH CARR, Esq.

THE NAME MAESHOWE.

In considering what may probably be the origin of such a designation as this for an ancient and elaborate sepulchral mound of a people anterior to the Norsemen in Orkney, and who dwelt there we know not how long, we see at once that the latter syllable is merely the ordinary Norse term applied to sepulchral mounds in general. But this very circumstance may well lead us to surmise that the former one, Maes, not improbably represents the term applied to the barrow by the people, whoever they may have been, who were in the islands when the Norsemen first arrived there. We must therefore look to the Celtic tongues, in the first place, for its meaning. And the first thought which presents itself is that of the well-known Cymro-British, *maes*, a plain, which enters largely into the toponymic nomenclature of the Cambrian Principality.

But if this Cymro-British element occurred thus in Orkney, we ought to find it applied in many localities on the Scottish mainland, and more particularly to the many alluvial levels denominated *carses*. And the fact that it is not so found, affords a very strong presumption against its remote and isolated application to a tract of flat coastland in Orkney.

But in the Erse or Irish we find the word *mais*, signifying *massa acervus*. I cannot for my own part hesitate in believing this to be the

etymon of the first syllable of Maeshowe; and when we know that several promontories of the Orkneys are designated by the Erse or Gaelic term *moul*, it is difficult to resist the inference that, when the Norsemen first showed themselves on those weather-beaten isles, they found there certain inhabitants speaking a tongue approximating to Erse and Gaelic.

And, if I mistake not, the few other remaining traces of Celtic place-names in the Orkneys leave this inference unshaken, so far as they are indicated by the ordinary maps. Yet it is quite possible that a perfect collection and survey of all the designations given to the natural and artificial features of the country, might bring to light Celtic elements of a different character, and at present it is rather our duty to search for evidence than to hasten to conclusions.

Several words and modes of expression in these interesting inscriptions still require elucidation, whilst the two lines constituting No. VII.* have not yet been satisfactorily interpreted, even in their general sense.

It seems to me that light is thrown upon certain terms by parallel or analogous Anglo-Saxon forms or idioms, and being not altogether ignorant of Old-Norse, I have ventured to bring these Runes under the scrutiny of an Anglo-Saxon eye of somewhat long experience, in the hope that from a perhaps untried point of view I might be able, and yet without presumption, to perceive the meanings of some words or turns of expression more clearly than even Scandinavian scholars have yet explained them.

Though it has not yet been in my power to visit and inspect the Barrow of Maeshowe, yet the carefully-executed casts of the Runes, now accessible in the Museum of Antiquities in Edinburgh, have been studiously examined, as well as the lithographed transcripts of the latter.

The first case of doubt that calls for examination is the word *HAUA* in

RUNES II.

THOLFR KOLBAINSSON RUNAR THISAR HAUA. And the following remarks upon it are offered to suggest a possible and even probable signification, without laying any claim to greater certainty.

* The Numbers of the Inscriptions are taken from the work, "Notice of Runic Inscriptions, discovered during recent excavations in the Orkneys, made by James Farrer, M.P. Printed for private circulation. 4to, 1862."

From haugr, a how or barrow, and from the verb hauga, to construct a barrow or grave-mound, a derivative noun of agency or personal association, in the form of haugi or hauga, haui or haua, might have been regularly formed, in accordance with Old-Norse, or Icelandic, usage and analogy, no less than with Anglo-Saxon. And the term would be used to indicate a person specially concerned with, or associated with, the How.

Nothing is more likely than that a How-warden should be so called;—a man who either assumed, or was charged with, the care of the barrow. Even now, such a person would be called in Northumberland “the howey.” If this be the true account to be given of HAUA, then the translation of No. II. would run :

“Tholf Kolbainson inscribes these Runes,—The How-warden.”

Or in Latin,

“Tholf Kolbainson hasce sculpit runas acervi custos.”

(“acervarius.”)

RUNES VII.

The obscurity of the first half of this inscription has perhaps been caused by some of the partly obliterated vowels having become very like the Runic sign for S. There is also, near the beginning, a combination of syllables suggestive of a proper name, and readily misleading the eye from the true reading. And to a Scandinavian the latter is less evident possibly than to an Anglo-Saxon, from the absence of a definite article in a place where in more cultivated Old-Norse it might be looked for.

We find, however, the key to the true reading of this first half-line in its final word, which has been well shown by Dr Charlton to be most certainly FALHI, or falhk, that is, falkhi, falcon. And fortunately there is no great difficulty in identifying the next word behind it, as UKURIR, the possessive pronoun, our, with its masculine nominative termination.

Then if we continue to trace backward by this same inductive method (*de noto in ignotum*), we come to an unquestionable personal name in URMIN, or URMIR, or ERMINR.

But now, on the principle of kindling the fuel at both ends and leaving the middle to illuminate itself, it is time to look to the beginning.

Glancing over this initial portion, the eye quickly seizes the familiar phrase **I RIKII**. The rest is now all plain, and the Runes may be read,

NU ER I RIKII LIDI ERMIN UKURIR FALHI.

"Now is in the country (of Orkney) Mate-Ermin our falcon."

"Nunc adest in regno sodalis (sive dilectus) Erminus, falco noster."

Before we take a step further and look at the second half of these Runes, let us bear in mind that the Old-Norse, or Icelandic language, on the one hand, the Anglo-Saxon on the other, are found to afford continually the means of reciprocal elucidation or correction. In the present instance it chanced that Anglo-Saxon habits of thought led to a different reading of the last five letters of the second half-line, from that which had presented itself to Scandinavian scholars, and simply because it was the first meaning that these same five letters would convey to an Anglo-Saxon, though not the first they would express to a Norseman. And yet it is quite as good Old-Norse to read them **OM OTR**, as to connect them into one word, forming an adjective comprising a negative particle, and having no obvious aptitude in connection with **Kiabik** and the intermediate words. But the sense is perfect if we read **OM OTR** :—

KIABIK VIL SAEHIA IR OM OTR.

"Kiabik will tell you about Otter,"

or "about the otter."

If **OTR** is a proper name, then it may be intended to designate another falcon called, like the first, after some friend or person of distinction who may have been the donor, or at least a former possessor of the bird. But the omission or absence of the definite article, and above all at the conclusion, and where space was perhaps wanting, is not decisive against the claims of a real otter or *Mustela lutra* to the honours of **Kiabik's** recital. These keen and sagacious animals are quite capable of domestication, and of being rendered as serviceable to their masters, under water, as the falcons were in the air.

Kiabik was doubtless the menial falconer. The intent of the inscription was, we may infer, to make known the long-expected arrival in Orkney of a stanch and favourite tiercel, or male, of the ger-falcon, from Iceland or Norway.

In closely literal Latin ;—

“Dicebat Orcason in runis quas inscripsit ;
nunc adest in regno dilectus ille Ermin, falco noster :
Kiabik autem referet vobis de Ottare” (sive “de lutra.”)

Or again, a little expanded, and in metre, for the original has a certain measured cadence and a semblance of alliteration ; as

Orcasonr sahthi 'a runon ————thaem ir han ristu
Nu er i riki ————lid Ermin uk'rer falki
Kiabik vil saehia ————ir om otr.

Considet advectus bene nostro in litore falco
Erminius ; socii, vos quoque scire velim !
Lætor enim Orcasius, runasque incidere curo ;
Pluraque de lutrâ Kjâbicus ipse feret.

Or much better, in old English and in congenial rhythm,

* Orcason here sayeth,—In runès he writeth,—
Ha ! Now in the land is—Litl Erm ourè falcon !
Kiabik wille saye you—o' th' ottre !

RUNES VIII.

This interesting inscription may perhaps be read,

INGEBORG HIN FAHRI ÆHKIA.

MORHK KONA HAFER GARIT LUTRIN HER MIHKIL OFLATE.

Ingeborga pulcra vidua,

Tenebrarum Domina hanc demissè se gerentem magnificam auguravit futuram.

Ingeborg the fair widowe ;

The Mirk-Quene hath here decreed the depressed to become greatly exalted.

It may, however, be argued that we are scarcely justified in assuming that mork is only another form of myrk, darkness (the final r being cast out in composition) ;—and I must admit that my own thoughts suggested also mörk kona, *silvarum femina*, the woman of the woods and wilds,—some poor Celtic captive who had acquired the character of a spaewife. But against this are the emphatic particle *her*, here—that is to say, in the dark and haunted How ; and the fact that the Old-Norse myrkr or myrk has passed into the Danish and Swedish mörke, in the same sense of darkness.

The Mirk-Queen would be the female sprite supposed to inhabit the

gloom of this mysterious chamber within the barrow of Maeshowe. All such barrows were believed to be haunted, and sometimes defended, by supernatural beings.

The verb *luta*, to loot, or bow down the head, might supply like others a verbal noun of agency, *lutari*, one who louts, who bends low, and in a secondary sense one who is either downcast and depressed, or submissive and tractable. And like other such verbal nouns in Icelandic, as in English, it might include the idea of feminine agency though masculine in form.

Since this short suggestion of the above as a possible reading was written, the following fuller examination has seemed necessary, in the hope of offering a better :—

The second portion of this inscription hardly indeed admits of being read and interpreted with any assured exactness, not that its words fail to convey a meaning, but because the letters may be read differently, and so as to form very different words. To begin with, the runic sign for *g* and for *k* is one and the same, so that the first two words may either be read *MORG KONA*, many a woman or lady,—or *MORK KONA*, the Mirk-Queene, or female spirit of the darksome interior of the How.

In the next place, a large and tortuous flaw of the stone, which is exactly shown upon the plaster casting, traverses one of the characters, in such a manner as to cause a word to have been read and copied as *FARIT*, which seems to have been intended for *GARIT*.

And this, if it be so, will not indeed invalidate the interpretation given in Denmark and Norway; but as the word *GARIT* is one of very various power and idiomatic use, it opens the door to other possible readings of the next word, besides those which had at first presented themselves. And not only does this following word contain runes which may stand either for *u* or *x*, for *t* or *d*, but there is much uncertainty whether the important consonant *r* is present or not, and by which of two vowels it is succeeded, and whether even, if the *r* be discarded, we ought not to admit an *s*.

Yet instead of dismissing the whole inquiry, when so much is uncertain, let us rather see how many readings can be entertained, and allow them to come successively under the impartial examination of any who may be curious in the matter.

The investigation may not be altogether barren, even though its direct object be not attained.

First, then,—still retaining the band-rune TR,

MORK KONA HAFIR GARIT LUTRI IN HER MIHKIL OFLATE.

Tenebrarum domina fecit huc pronam introgredi valdè arrogantem.

The Mirk-Queene caused a very proud personage to creep in hither.

If we reject the band-rune, we then have the readings communicated by the Scandinavian interpreters, and exhibited in Mr Farrer's beautiful book on Maeshowe.

Yet if instead of FARIT we read GARIT, it is our business to see whether such a change may not render further inquiry requisite.

It seems to me that at least three readings must be considered.

MORK KONA HAFIR GARIT (H) LUT SIN HER MIHKIL OFLATE :

Ingeborg, pulchra vidua ;—

Tenebrarum domina hic sortem auguravit planè magnificam.

Ingeborg the fair widowe ;—

The Mirk-Queene has here bespoken her a splendid destiny.

MORG KONA HAFIR GARIT (H) LUT SIN HER MIHKIL OFLATE :

Ingeborga, pulchra vidua ;

Multa foemina hic sortem impetravit sibi magnificam.

Many a dame has here secured very splendid prospects.

MORK KONA HAFIR GARIT LUTIN HER MIHKIL OFLATE :

Tenebrarum domina hic prædixit incurvatam multò splendidiorẽ futuram.

The Mirk-Queene has destined the prostrate here, to become very exalted.

There is also the possibility of LYDI IN HER, people in here, indefinitely. But *hlut sinn, sortem suam*, is more probable.

RUNES IX.

THORNY SAERTH.

In Irish and in Gaelic, *sagart*, from the Latin *sacerdos*, is the common term for a priest. Thorny must have been conversant with Celtic countries either by education in the Christian seminaries of Ireland or of Iona, or by missionary labours among the Celts. For his Celtic title as Priest

had come to be appended as a surname. The *g* in *sagart* is, I believe, sometimes but little heard in pronunciation. The Anglo-Saxon word is *sacerd*, and this again would readily slide into *Saerth*.

RUNES X.

THORER FAMETR.

The last Rune in Thorer's appellation of *Fámetr*, was found by me, on carefully inspecting the cast at Edinburgh, to be a band-rune of *TR*, not simple *R*, as it had been read. *Fámetr* means one who is sated, or satisfied with few things, with less than others, a moderate, ungrasping, temperate man. All honour to him who had earned such a title in those times: *Pauco-satur*, *moderatus*.

I have now, however, discovered from Mr Farrer's and Mr Petrie's admirable transcript of the Runes, that the first character in this inscription has by myself and others been entirely misread. It is not *TH*, but *P*, as may be seen by the distinctive line below preserved in the transcript. But this is not all. Another line, preserved at the head of the second Rune in the following word, shows that it stands not for *o* alone, but for *ok*. Now *rok* is snow-drift, and *meiddr* is the participle *hurt* or *stricken*, from *meida*, to hurt, *Fok-meiddr* is therefore snow-stricken. But what is *porrir* or *porir*? We have it still in our own expression *purblind*. Here it stands as the byname of this northern Hannibal, his real name being omitted.

PORIR FOKMEIDDR,

"Purblindly the snow-stricken."

And beside him is a quadrupedal likeness of perhaps an ancestor of our Skye-terriers, by which, doubtless, he was led from place to place. The inscription may be represented in Latin by *LUSCINUS, NIVE-LÆSUS*.

RUNES XII.

TOTAR FILA.

Totar the fooler or jester; *Totar scurra*. From the noun *fifl*, *fatuus*, proceeded the verb *fifla*, to befool, or to play the fool; and hence would be formed in the regular manner a personal noun of agency, *fifla* or *fila*, meaning a buffoon or professional banterer and jester. Similar derivations are common enough in the living popular speech on either side of

the Border; and such a byname as Fooley would be readily assigned to any one who deserved it by his buffoonery.

In the Orkneying saga we find five or six bynames thus formed, chiefly terminating in *a*, but also in *i*. Thus Kolbeinn Hruga (in Latin *Kolbeinn accumulator*), but in plain Scottish and English Kolbein, the rugger, the rogue. Aulver Rósta, Aulver the brawler; Erik Spáki, Erick the cautious, the pawky; Kulfr Skurfa; Eysteinn Glumra, or the thunderer. Such words in *a* may sometimes be regarded as indeclinable adjectives formed from nouns.

RUNES XIII., XIV.

This inscription is an animated defence of the Jerusalem pilgrims against the imputation cast upon them in No. XX.

THAT MAN SAT ER IKI GÆNHIAT.—FE VAR FORT ABROT;
 THRIMNAUDOMS VAR FE BROT FORT, HÆLTER AN THAIR IERSALA
 MEN BURTU HAUG THANA ÆMROSTITH:
 ÆHI, IMILI AV VILFOKS ÆMURUM.

“That maun be sooth that’s not gaynsaid!”
 The treasure was carried away,—
 Of a certainty it was carried away,—
 Before The Jerusalem-men most miserably broke this Howe,
 Alas! amid the wild-folk’s lamentations.

“Verum putatur quod non negatur.”
 Ablatus fuit thesaurus,—
 Proculdubio ablatus fuit priusquam
 Hierosolymitani infregere tumulum tristissimè;—
 Eheu, inter lamenta indigenarum.

RUNES XIX., XX.

On looking at the transcripts of the Runes of Nos. XIX., XX., (having previously merely seen the interpretations sent from Denmark and Norway, and also Dr Charlton’s), I was gradually led to read them very differently from any of these, and from the other readings and renderings exhibited in Mr Stuart’s “Notice of Excavations at Maeshowe.” They begin—

SIA HOUHR VAR FYRLATHIN HÆLLE LOTHBROKAR
 SYN(D)AR HÆN(D)AR

and the first five words are of themselves extremely easy to read and translate. They are as manifest to an Anglo-Saxon as to an Icelandic student, and signify

“The how was a forsaken vault¹ (or cavity),”

and then follow three words, which the idiom of the Old-Norse language points out to be all in the genitive plural, but truncated of their final vowel *a*, because here not heard in pronunciation.

To an old Norseman the foregoing context would at once show the genitival character of these words, and the unessential final vowels would be left out. But the question remains: What do they import?

Ragnar Lodbrok obtained his byname, which conveys a stronger meaning than the more produceable one of shaggy-breeched, commonly given to it, from being a northern Esau or Orson. It signifies *hirsutie braccatus*; or, as we may venture to express it in old English, shag-behosed. When the appellation was conferred upon him, there is little doubt but that, in admiration of the Scottish garb, he had appeared among his countrymen in the kilt, and that their keen wit marked him ever after with an appropriate byname. But what can the term mean here?

To make out this we must look forward and examine *SYNAR HÆNAR*, which are (coming after *FYRLATHIN HÆLLR*) plainly genitive plurals. The most essential word to determine is that which must be the leading substantial term, *hænar*. Hitherto it has been construed as a feminine pronoun, *her*, or *of her*, and as representing *henner*, *ejus*, feminine.

But as such it has no antecedent, for from the very nature of things *lodbrokar* cannot be one. *Hænar*, however, may very easily stand for *hændar*, or *hændara*, *jaculatorum* “of lance-casters.” But *synar* cannot be what it has been rendered. Yet it may very well be in like manner an imperfect spelling of *syndar*, or *syndara*, the *d* after *n* being often suppressed in pronunciation, as in the Danish, Scottish, and Northern English, and this word would mean *natatorum* or *natantium*, swimmers. And the three words taken together, namely, *LOTHBROKAR’ SYNDAR’ HÆNDAR’* would be in English,—of shag-behosed swimming harpooners,—*jaculatorum natantium hirsutie braccatorum*. And they point to a race of kilted

¹ Hœlr, doubtless the same as hœllir, *caverna*, a cave, natural or artificial.

harpooners, who, leaving their boats on approaching the marine animals, swam forward to inflict the deadly harpoon-cast.

Now, had the words of the first line in XIX. and the first in XX., thus interpreted, constituted the whole inscription, I could not have felt anything like the confidence I do feel in the soundness of the present interpretation, though I was led to it by the words themselves, and by no previous theory whatever.

But let us see what the next lines say. We are reading the lines in the order followed by Munch and Rafn, with the improvement adopted by Dr Charlton, to which we shall presently come. The second line in XIX. and the second in XX. stand thus, as I read them, keeping as in one word eight characters that have been divided into two.

(6)
THEIR VORO HVATIR SLYTUORA—MÆN SÆM THEIR VORO
FYRI SIDR.

Had we found SLYTBAKRA instead of the present word, the sentence would have been at once read with what I believe to be its true meaning, namely,

“They were adventurous whalesmen, that were they for the south.”

But in reality SLYTUORA has just the same sense, unless that perhaps it applies more especially to the old males, or bull-whales.

Ūr or uri was the great northern bison or urus; Sletbokr was the appellation given to the smooth-backed or great bearded whale, *Balæna mysticetus*, in contradistinction to the fin-back and grampus. Thus the term SLYTOŪR, or smooth-bull, is equivalent to a longer and more cumbersome word SLYTBAKŪR, or smoothback-bull; whether applied to the old male of the Greenland whale, or to all his tribe. Our sailors still speak familiarly of the bull, the cow, and the calf-whales.

In this instance the vowel of the genitive plural has been inserted, obviously because it was necessary in pronunciation. SIDR has hitherto been translated as if it were SIR, Latin *sibi*; but the band-rune DR is clearly shown by Dr Charlton in his engraving.

In the last clause we detect the national self-complacency of the Norsemen, even whilst they bear honourable and willing testimony to the remarkable prowess of the Celtic, or rather, let us say, the Gaelic

whale-harpooners, for they were pronounced to be gallant and dexterous for southern men, the achievements of the Norsemen themselves being of course superlative.

UTNORTHR IR FE FOLHIT MIKIT
 THET VAR JORSALAFARAR BRUTU ORKOUH LIFMIDS ÆLIA
 JARLS
 LOEFT ER HER VAR FE FOLHIT MIKIT. RÆIST
 SIMON SIHRY UR RONISEYE
 SIHRITH.

“Northwestward is much treasure hidden.

It was the Jerusalem-pilgrims (who) broke the Orkhow in the mid life
 of Jarl Ælly.

When here lifted was much hidden treasure.

Writes

Simon Sihry from Ronaldsey.
 Sihrith.”

SALIR SA ER FINA MA THAN OUTH HIN MIKLA.

“Happy is he who may find that great treasure.”

(Meaning that said to be concealed to the north-west.)

The participle LOEFT is the same as the more commonly written lopt, lifted; whereas ‘left’ would be leifit. Lifted is here precisely *asportatum*. And it shows the antiquity of the Scottish legal phrase of “lifting money.”

The whole inscription would read in Latin :—

Fuit hicce tumulus derelicta quædam caverna

jaculatorum natantium, hirsute-braccatorum.¹

Erant hi audaces balenarum insidiatores, imò erant pro meridie.

Alicubi, caurum versùs, latet infossa ingens pecunia.

Hierasolymam peregrinantes fuerunt, qui Orco-tumulum rupere, florente Ællio Comite

Quùm quidem pecunia multa dehinc sublata fuit, quæ sepulta lituerat.

Inscribit Simon Sihry à Roiniseye,—Sihrith.

Felix qui inveniet thesaurum illum ingentem.

O-Conacan abstulit nummos ex hoc tumulo.

From this inscription we learn that the Celtic people, who were inhabiting Orkney until driven out by the Norsemen, wore no trews or breeches, and that their nether limbs were hirsute; hence it is evident they were

¹ Hoc est, solo cincticulo Celtico, hirsutièque induti.

a kilted race, and of the Gaelic stem. They were expert in the use of the harpoon, whilst swimming from their boats to attack cetaceous animals. They were daring and successful in slaying the great bearded whale, and, as has been suggested, possibly the walrus. To them, and not to any earlier race, was the erection of Maeshowe attributed by the Norse writer of these runes.

Much treasure had been found in the how and carried away by the Norsemen, although the tumulus had been "forsaken" by those of the race to whom its origin was attributed. Hence we may infer that the treasure deposited there was for sacred purposes,—for the benefit of the dead,—and not such as could be withdrawn in times of danger.

We may further infer, that a successful whale fishery had been a leading cause of the existence of sufficient population and wealth upon the islands to account for such a structure as Maeshowe, and for the other marvels of these ancient people; and that the isles were not the mere sepulchres of Sutherland or Ulster, as I for one had been disposed to think not improbable. Lastly, additional probability accrues to the Gr. *opvξ*, Lat. *orca*, and Gaelic *orc*, a whale, as the etymon of Orkney, whilst a people using that term were there in the time of Mela, at the beginning of our era.

RUNES XXII.

BÓD HRODKIL SVOR OENGOLOENSKU.

Marriage Rokil swore to the Englishwoman.

Nuptias Rokil Anglæ juravit.

These runes are in great part Anglo-Saxon, and are inscribed in a beautiful feminine hand, indubitably that of an Anglo-Saxon lady, who, willingly or unwillingly, had been conveyed to Orkney by the Norse invaders of her country.

It is an old story briefly but clearly told.

The two first characters of the man's name are in a coarse male hand. They are either a falsification, or an honest restoration after an erasure.

RUNES XXXII.

The inscription here, divided into two parts by the figure of a compli-

cated knot skilfully designed, is quite unintelligible if read from left to right. But if we try it from right to left the difficulty vanishes, and we find it to be,—

THISSE SLI (SLÍT). Hoc solve—Undo this.

We have before us, therefore, a riddle-knot, which had doubtless often afforded amusement to the Norsemen and their fair dames and damsels in hours of winter leisure.

Mr STUART, in reference to the preceding communication, said it was remarkable that the Norsemen, who were so much given to the inscription of runes on stones in their own country, had left no such mark of their occupation in Sutherland, Caithness, and the Orkneys, except at Maeshowe; and it added to the interest which we must feel for that singular monument.

The thanks of the meeting were voted to Mr CARR for his valuable paper.

V.

NOTE OF A COPPER PLATE AND BRONZE ORNAMENTS FROM CLUNY.

By JOHN STUART, Esq., Sec. S. A. Scot. (PLATE V.)

Sir Robert Strange, the celebrated engraver, joined the Jacobite army in 1745, and continued to act along with it as one of the corps styled the Life-Guards, till the defeat at Culloden compelled him to fly for shelter to the hills, where he endured many hardships in the course of his wanderings.

Shortly before the battle of Culloden, the first battalion of Life-Guards, commanded by Lord Elcho, was billeted upon Culloden House. One evening, after Strange had retired to rest, as we learn from an interesting fragment written by himself,¹ an express arrived from Inverness about midnight, with an order for him to wait on the Prince as soon as possible. He rode directly to Inverness, and was shown into the

¹ Dennistoun's Life of Strange, vol. i. pp. 50-55.

Prince's bed-chamber. Soon after, the Prince, accompanied by Sir Thomas Sheridan and Mr Murray the secretary, came into the room, and Strange was informed that His Royal Highness wished to have his opinion, "relating to a circulation of one species of money or another, which it had been thought expedient to issue for the service of the army in general, but more particularly amongst the soldiery."

The result was, that Strange prepared a device for the notes which were to be issued. "It consisted," he says, "of nothing but the slightest compartment, from behind which a rose issued on one side and a thistle on the other, as merely ornamental; the interior part I meant should be filled up by clerks with the specific sums which were intended, &c.; and I proposed etching or engraving, in the slightest manner for expedition, a considerable repetition of this ornament on two plates, for the facility of printing; that each should be done on the strongest paper [so] that when cut separate, they should resist in some measure the wear they must sustain in the common use of circulation. The Prince had at this time taken the compartment out of my hand, and was showing [it] to Mr Murray, and seemed much pleased with the idea of the rose and the thistle. In short, everything was approved of, and the utmost expedition recommended me."

This seems to refer to plates for small sums, as Strange proceeds,— "We now talked of a circulation of larger sums, which would likewise be required. I gave it as my opinion, that I thought they could not do better than issue notes in imitation of the Bank of England, or the Royal Bank of Scotland, in the execution of which there was very little labour; that it would be necessary, if possible, to see such notes, in order to concert a form how they were to be drawn up, by whom paid, or at what period; if at a given time, that of the Restoration, I imagined, would be the properest. This produced a general smile."

Strange then describes the difficulties in getting his materials prepared in Inverness on the next day, which was Sunday, but succeeded in getting his copper plate on Monday about noon. "I had passed that morning," he proceeds, "in making a composition of etching varnish; but had not perfectly proportioned the materials, for I well recollect the aquafortis playing the devil with it; but which was repaired with some little trouble. In short, it mattered not much, provided the purpose was

answered ; and indifferent as things might be, I would at this moment purchase a series of them, even at a considerable expense, to decorate, as it were, this volume with the more juvenal works of its author. Such would be a curiosity of the kind. The reader may naturally conclude, that on this occasion I lost not a single hour. Solicitous in the service in which I was employed, my activity was of course redoubled. I laboured till late at night, and waited the approach of day with impatience. Not a fortnight had elapsed when I was ready to begin printing, and had even forwarded the notes for a larger circulation."

At this juncture came tidings that the Duke of Cumberland with his army had passed the Spey on the 13th of April. Strange then went to the secretary's office, and delivered over the whole of his charge, together with the English notes which he had got as patterns for his large notes.

The plate which, by the kind consent of its owner, Cluny Macpherson, is now exhibited, is without doubt one of those prepared by him, although the device is somewhat different from that referred to by Strange, in the fragment of autobiography just quoted. Its history cannot be traced from the time when it, along with the other materials for printing notes, was placed in the hands of the Secretary, Murray. It was found on the west end of Loch Laggan about thirty years ago, and it is supposed that it had been dropped there in some of the hasty movements which followed the rout at Culloden. It was presented to Cluny by General Hugh Ross. The plate contains eight notes, of which only the first four are filled up with the sums of "one penny," "two pence," "three pence," "six pence." All the notes are of the same design, the letters P. C. in the centre, surmounted by a crown and three feathers, and with a trophy of warlike weapons on each side. The engraving is slight, but is marked by the delicacy and skill of the great artist.

In Plate V. an impression is given of the Notes from the Original Plate, transferred to stone.

The bronze ornaments now exhibited, belonging to Cluny Macpherson, were found in a box on the Hill of Benibhreach, in Lochaber, under 6 feet of moss, by a shepherd of Colonel David Ross of Tirindrish.—See pages 46, 47.

WEDNESDAY, 15th February, 1865.

JOSEPH ROBERTSON, Esq., LL.D., one of the Vice-Presidents,
in the Chair.

The following gentleman was balloted for and elected a Fellow of the Society :—

ARCHIBALD ANDERSON, M.D., Inspector-General of Hospitals, Netley.

The Donations to the Museum were as follows, and thanks were voted to the Donors.

- (1.) TREASURE TROVE. By the HON. THE LORDS OF H.M. TREASURY, through JOHN HENDERSON, Esq., Queen's and Lord Treasurer's Remembrancer.

Six Rings of rich yellow gold, each formed of several wires. Two of the rings are formed of three wires simply plaited together, the other larger rings, apparently of eight wires, are interlaced, so that two of them form a twisted ridge projecting round the circumference of the rings, one of these rings is imperfect; their respective weights are, 143, 210, 130, 234, 198, and 214 grains. Small, plain penannular Ring $1\frac{1}{10}$ th inch in diameter, tapering towards its opening extremities, weighing 104 grains. Two portions of apparently larger rings or armlets, weighing respectively 173 and 184 grains.

Piece of Native Gold, showing marks of cutting at one extremity, and weighing 209 grains, found among ruins in the Western Islands of Scotland.

Stone Hammer Head, measuring 11 inches in length, with perforation towards the thickest and rounded extremity, gradually tapering to a thin edge or face in front. Found at Silvermine, parish of Torphichen, Linlithgowshire.

Irregularly-shaped piece of Sandstone, about 8 inches in diameter, with a shallow cup-shaped indentation on its upper surface. Flat piece of triangular Mica Schist, pierced with a hole at the top, probably a net-sinker, its greatest length is 8 inches. Small piece of Micaceous sandstone, measuring about 4 inches in greatest diameter, with a circular perforation in the centre. Found together at Fetterangus, Aberdeenshire.

Fig. 1.—5 in. in length.

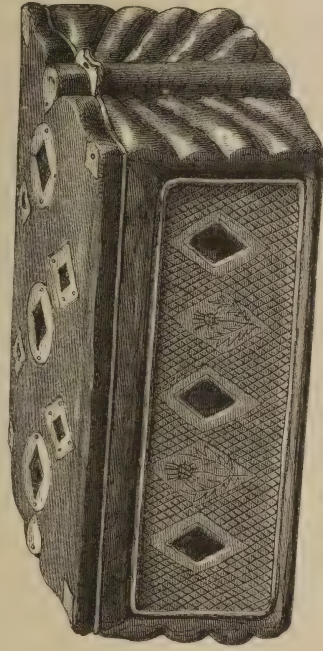


Fig. 2.—Inside of Lid of Casket.



Fig. 3.—Length of Stone, $3\frac{1}{2}$ in.

Bronze three-legged Pot with Ears for the handle, and encircled at its greatest circumference by a belt of two projecting lines, it measures 12 inches in height, and 9 inches across the mouth, and was found while digging in a garden at Bathgate, Linlithgowshire.

Ebony Casket, 5 inches long, by $2\frac{1}{2}$ inches broad, and $2\frac{1}{2}$ inches deep.

The lid of the Casket is ornamented with seven pebbles set in silver; each side is covered with a plate of copper, showing a row of lozenge-shaped openings, in which pebbles are also set, a Scots Thistle is engraved between each of the openings; the rest of the plate is covered with an ornamental pattern of lines crossing each other diagonally; each end, and the bottom of the casket, is rudely cut into rounded projecting bars or ribs, and in the centre of the bottom part is a lozenge-shaped plate of copper, rudely ornamented with a pattern of crossing lines. On the lid inside, there is a long-shaped plate of lead, on the centre of which is planted a small lozenge-shaped plate of copper; the lead plate has the following inscription roughly etched upon it, apparently with an acid, and on the small copperplate, in its centre, is engraved the date, and below it is a continuation of the inscription:—

A N A D
O M A



T.S. W.S.

M A D E
BY GEO
RGE HE
A R I O T

which may be read ANNO DOMINI 1588. T.S. W.S. MADE BY GEORGE HEARIOT; the initials T.S. W.S. are no doubt those of a husband and wife, the owners of the casket. The inside of the box is lined with thin plates of copper, with a plate of the same metal dividing the interior into two portions. It contained a large rough pearl, various specimens of crystal, amethyst, and quartz, many of which are polished on the natural facets; and also a number of small pebbles or agates of different colours.

The box is a very curious and interesting relic, and the more so as it seems to bear the name of our ancient Edinburgh Goldsmith and

Jeweller, the well-known George Heriot, or perhaps that of his father. A sketch of the casket is given in the accompanying Plate IX. figs. 1 and 2.

Heart-shaped Nodule of Clay Ironstone, with copper handle.

The stone measures $3\frac{1}{2}$ inches long, and $2\frac{1}{2}$ inches broad, and shows numerous natural markings; a band of copper, $\frac{5}{8}$ ths of an inch in breadth, folded into two small and one large central loops, forms a handle, which is fastened by a piece of metal pierced through the top of the stone. On the centre loop is engraved what appears to be the following letters: BALWIREY; and on each of the side loops are square-shaped ornamental patterns, divided in the centre by crossing lines, in each of the sub-divisions of which is a letter or symbol. At the one extremity of the handle, where it is fixed to the stone, hangs a heart-shaped pendant of copper, on which some letters are engraved, apparently, E H J, on the outside of this pendant is fixed a small oblong-shaped plate of silver. At the other extremity of the handle is appended an hexagonal plate, on which is inscribed

A.D.

1200

M.S.

over this, again, is suspended a somewhat cross-shaped piece of copper, pierced with a circular hole at the lower and cross-shaped extremity.

The whole appearance of this curious relic is suggestive of its having been used as a charm; and its rude cabalistic looking natural marking, and inscribed characters, or letters, at least reminds us of our celebrated wizard, Michael Scott of Balwearie. (See Plate IX. fig. 3.)

The casket and heart-shaped stone were found together, in a box, during the process of trenching the ground at Crockbet, in the parish of Carmichael, Lanarkshire.

Five Silver Table Spoons (one of which wants the handle) with oval mouths, and having straight handles, terminating in ornamented circular extremities, on which are engraved the letters I.B.; on the back of the mouth of the spoons are engraved the letters A.Y.C. The spoons were found, in taking down an old house in the Townhead at Irvine, Ayrshire.

Portion of the upper part of a Sepulchral Urn of yellowish-coloured clay, with black fracture, and rudely ornamented with crossing lines; also a Necklace, formed of seven oblong triangular pieces of jet, and thirty-

seven oval shaped beads, found at Bogheadly, in the parish of Fetteresso, Kincardineshire.

Portions of a small Sepulchral Urn, five inches in height, of reddish clay, with specks of mica interspersed, and showing a black fracture, it is unornamented on the surface, and of a tall cup-shape form, and was found in a cist in ploughing a piece of uncultivated ground at Restinghill, parish of Dunnottar, Kincardineshire.

(2.) By the Hon. ARTHUR H. GORDON, Governor of New Brunswick, through John Stuart, Esq., Secretary.

Two Stone Cups, with short handles. One of the cups is of a roundish shape, of micaceous sandstone, $3\frac{1}{2}$ inches in diameter, and $2\frac{1}{2}$ inches in height; it is ornamented round the upper part with a band of rudely cut projecting knobs, the handle is $1\frac{1}{2}$ inch in length, and has a round depression cut on its upper surface. The other cup is larger, somewhat oval in shape, and straight in the sides, which are covered with incised lines in zigzag herring-bone patterns; the handle, which is imperfect, has been short and rounded, and has had a perforation through the centre. It measures 4 inches in diameter at the top, and is three inches in height. The cups were dug out of a large cairn on the south slope of Knockargity, Aberdeenshire, while trenching, some years ago. They are referred to in a communication "On the Earlier Antiquities of the District of Cromar, in Aberdeenshire," by Mr John Stuart, printed in the Proceedings of the Society, vol. i. page 261.

Small triangular-shaped Stone Celt, $3\frac{3}{4}$ inches in length, and $1\frac{1}{2}$ inches across the face.

Greyish Flint Arrow-head, 3 inches in length, and $2\frac{1}{2}$ in greatest breadth, showing remains of a stem and barbs. The arrow-head and celt were found near the village of Tarland, Aberdeenshire, in the neighbourhood of a circle of upright stones, which are now removed. These are also noticed in Mr Stuart's communication, referred to above.

Two Stone Celts; one 5 inches in length, by $3\frac{1}{4}$ inches in greatest breadth, of greenish-coloured stone, with a groove deeply cut round the greatest part of its narrowest extremity; probably for attaching it to the handle.

The other is more cylindrical in shape, $4\frac{1}{2}$ inches long, 2 inches in

breadth, with a groove similar to the other for attachment to the handle. These celts are similar to some specimens in the Museum received from America, and they probably are also from the North American Continent.

Ring or Whorl for the distaff, of soft stone or coarse earthenware, measuring $1\frac{3}{4}$ inches in diameter.

(3.) By the KIRK-SESSION of the Parish of Dull, Perthshire.

Sculptured Slab of Yellowish Sandstone, measuring 2 feet 8 inches in length, by 16 inches in breadth, and 2 inches in thickness. On it is rudely sculptured in low relief, towards one extremity, a group of 6 men, apparently wearing bonnets, their dresses formed of numerous vertical folds, and each man carries a circular shield, which is ornamented with an incised circle in the centre, and a pair of smaller circles on each side of it; a horseman and dog follow the men, and he is again followed by another dog and another horseman, only partially sculptured, the stone being imperfect.

(4.) By the Rev. J. O. HALDANE, Kingoldrum, Forfarshire.

Large Stone Ball of a greenish stone, measuring 6 inches in diameter, it was found by a labourer at about a depth of 2 feet below the surface of the ground, in the parish of Airlie, Forfarshire.

(5.) By WILLIAM WILSON, Esq., Berwick-on-Tweed.

Iron Pile Shoe, formed of a solid square-shaped and pointed extremity, from which proceed four long iron straps; it formed the point of one of the piles of the old wooden bridge of Berwick-on-Tweed.

(6.) By JAMES SIMPSON, Esq., Melrose, through JOHN ALEXANDER SMITH, M.D., Secretary.

Portion of a Glazed Floor Tile, $4\frac{1}{4}$ inches in breadth, and 2 inches in depth; it is formed of red clay, with a layer of yellowish-coloured clay on its surface, about $\frac{1}{4}$ of an inch in thickness, on which is figured a coloured pattern of curved lines and fleur-de-lis. It was found 3 feet below the surface of the ground, and at a distance of about 300 yards to the east of Melrose Abbey.

(7.) By the late ROBERT SCLATER, Esq.

Two square-shaped Steel Dies, being the obverse and reverse of a silver twopenny piece of Queen Anne, of the date 1711. E., mint mark for Edinburgh, under the bust.

(8.) By the ROYAL IRISH ACADEMY.

Transactions of the Royal Irish Academy, vol. xxiv. part 2. 4to. Dublin, 1864.

Proceedings of the Royal Irish Academy, vol. viii. 8vo. Dublin, 1861-64.

The following communications were read :—

I.

NOTICE OF THE SITE OF THE BATTLE OF ARDDERYD OR ARDERYTH.

By WILLIAM FORBES SKENE, Esq., F.S.A. Scot.

Chalmers, in his Caledonia, after narrating the events connected with the reign of King Arthur, and which followed his death, gives the following account of this battle, couched in that extraordinary style, which he seems to have considered as the perfection of historical narrative.

“Such were the events which occupied five and thirty years, from the death of Arthur, to the battle of Arderyth, in 577. The British Triads reprobate this skirmish, as the *nugatory battle* of Britain. Whatever cause may have moved the wrath of the kings, whether a *bird's nest*, or a disputed boundary, Ryderech, the munificent king of Stratheluyd, defeated, on the height of Arderyth, Aidan of Kintire, who is stigmatised by Merlin, the Caledonian Poet, as *Aeddan Fradaug*, the perfidious Aidan. Merlin was a witness of the conflict, and he had the envied honour of wearing on that decisive day, the golden torques. Gwenddolau, the patron of Merlin, fell in the treacherous field. He merited a more disgraceful fate : Gwenddolau, according to the habits of the people and the perturbations of the age, had called in Aidan as an auxiliary against the munificent king of Alclyd” (vol. i. p. 246). And he adds, in a note :—

“It is of more importance to settle the site of the conflict of Arderyth ; to give it a local position as well as a poetic name ; it was not on the Solway, as the editor of Lhwyl's ‘Commentariolum’ supposes (p. 142), but on the Clyde, as probability attests : from a consideration of all the circumstances, it seems more than probable that *Airdrie*, in the parish of New Monkland, Lanarkshire, which was in the territory

of Rydderech, and is at no great distance from the Clyde, is the true site of the battle of Arderyth."

Chalmers took this account from the Welsh traditions, which he has strangely perverted; but, though I conceive he is right in considering this battle to have been a historical event, I consider him quite wrong as to the site he has fixed upon.

It may be as well to state first, what the Welsh traditions really tell us regarding this battle.

They are to be found partly in the triads, partly in the old poems.

In the triad called the three frivolous battles of the Isle of Britain. The second is said to be the battle of Arderyth, and a lark's nest was the cause of it, where 80,000 men were slain of the nation of the Cymry.

In the triad called the three retinues of the passes, the third is the retinue of Drywon, son of Nudd in Rhodwydd Arderydd. The word Gosgord here translated Retinue, was a body of 300 horsemen who defended the different passes in the island.

In the triad of the three horses who carried three loads of the Isle of Britain, the second load was that of Cornan, the horse of the sons of Eliffer Gosgordvawr, which carried Gwrgi and Peredur, and Dunawd Bwr the sons of Pabo and Cynvelyn Drwscl, to see the sacred fire of Gwenddolau in Arderydd.

In the triad of the three loyal tribes of the Isle of Britain, the third was the tribe of Gwenddolau, the son of Ceidiau, who maintained the conflict for forty-six days after their lord was slain, and would not desist from battle and conflict until they should revenge his death.

In the triad of the three men who wore beards, that achieved the three good assassinations of the Isle of Britain, the first was Gall son of Dysgyvedawg, who killed the two brown birds of Gwenddolau, son of Ceidio, that had a yoke of gold about them, and devoured daily two bodies of the Cymry at their dinner, and two at their supper.

And in the triad of the three bulls of battle of the Isle of Britain, the second is Gwenddolau ab Ceidio.

There is a curious poem in the black book of Caermarthen, a MS. of the 12th century, which evidently relates to this battle. It is in the form of a dialogue between Taliessin and Myrdin, and is so curious a specimen of these old Welsh poems, that I may give it entire.

It is also curious, from containing a mention of Nemhtur, the mysterious tower, which was the birth place of St Patrick.

How sad to me, how sad,
Is it come to an end with Kedwy and Cadvan.
Glaring and tumultuous was the slaughter,
The shield was battered thro' and perforated.

TALIESSIN.

It was Maelgwn that I saw combating,
His household before the tumult will not be silent.

MERDIN.

Before two men in Nevtur they will land ;
Before a passing object, and an apparition on a pale horse.
The slender bay will bear them.
Soon is seen his retinue with Elgan.
Alas for their slaughter, a great journey they came.

TALIESSIN.

Rhys the one-toothed, a span was his shield ;
Even to thee he came a perfect prosperity.
Kyndur was slain ; beyond measure they deplore.
The generous ones were slain right speedily,
Three men of note, great their fame.

MERDIN.

Through and through, in excess and excess they came ;
Beyond and beyond, there came Bran and Melgan,
They slew Dinel in their last conflict,
The son of Erbin, and his retinue.

TALIESSIN.

The host of Maelgwn, it was fortunate they came,
Slaughtering men of battle, penetrating the gory plain.
Even the battle of Ardderyd,
When will be its use,
Continually his hero they will prepare.

MERDIN

A host of flying darts, reeking with blood was the plain,
A host of wounded warriors, frail they were,
A host, when wounds are given,
A host, when put to flight.
A host is overturned
In their combat.

TALIESSIN.

The seven sons of Eliffer,
 Heroes when put to proof,
 Avoid not the seven spears,
 In their seven stations.

MERDIN.

Seven blazing fires,
 Seven in front of battle,
 The seventh is Cynvelyn,
 In every chief assault.

TALIESSIN.

Seven spears that shall pierce,
 Seven river fulls
 Of blood of chieftains,
 They shall fill.

MERDIN

Seven score generous ones,
 Become ghosts,
 In the wood of Celyddon,
 They came to an end.

Since I am Merdin,
 After Taliessin,
 Let my prophecy,
 Be made known.

The battle of Arderyth, is also frequently alluded to in the poems attributed to Myrddin. In his Avallenau he says :—

Alas Gwendydd, loves me not, greets me not,
 I am hated by the chiefs of Rhydderch,
 For after Gwenddolau no princes honor me
 Yet in the battle of Ardderyd, I wore golden torques.

Again,

I have been here so long, that sprites do not shock me,
 And I tremble not at the dragon
 Of my Lord Gwenddolau and his brethren,
 Who have bred a pestilence in the woods of Celyddon.

and in the Cyvoesi Myrddin, which is in the form of a dialogue between him and his sister Gwendydd, he calls it Gweith Arderyd ac Erydon,

that is, the battle of Ardderyd and Erydon, and says of it, "as Gwendolau was slain in the blood-fray of Ardderyd."

Finally, in the metrical life of Merlin, we are told that this battle was fought between Peredwr, leader of the North Welsh, and Gwenddoleu who governed kingdoms in Scotland; that Merlin went to the battle with Peredwr, and that Rodarcus or Rydderch, king of the Cumbri, also was there, and that Merlin fled to the woods after the battle.

This completes the traditionary accounts of Ardderyd as a mythic battle, but we can see that, concealed under these extravagant fables, are the outlines of one of those great historical struggles which altered the fate of a country. Rydderch was a Christian king; he restored Kentigern to his bishopric; was in communication with St Columba, and received a visit from him. Aedan was solemnly inaugurated as king by St Columba. They were the leaders of the Christian party. On the other hand, Gwendolau, with his sacred fire, and his birds who devoured men, was surely the type of the old paganism of the country. He is said to have been slain in the battle. Rydderch and Aedan became established in their respective Christian kingdoms. It was, in short, a great struggle between the supporters of the advancing Christianity and the departing paganism, in which the former were victorious. That it was an historical event, and that this was its character, appears from this, that it occurs in the "Annales Cambriæ," as a real event about the year 573; "Bellum Armterid inter filios Elifer et Gwendoleu filium Keidiau in quo bello Gwendoleu cecidit. Merlinus insanus effectus est," and that 573 is the first year of the reign of Rhydderch over Strathclyde, and of Aidan over Dalriada.

Where, then, was this battle fought? We ought, in the first place, to look for it in one of the great passes into the country; and a curious passage in Fordun first gave me a clue to the probable situation. In his notice of St Kentigern, he describes, evidently from some older authority, his meeting in the desert a wild man, who informs him that his name was Merlin, and that he had lost his reason, and roamed in these solitudes because he had been the cause of the slaughter of so many men: "qui interfecti sunt in bello, cunctis in hac patria constitutis satis moto, quod erat in campo inter Lidel et Carwanolow situato.

Liddel, as is well known, is the name of the river which flows west-

ward through Liddesdale, and joins the Esk about nine miles north of Carlisle. Near the junction is the border between England and Scotland, and from thence the flat and mossy district, called the Debateable Lands, bounded on the east by the Esk, extends to the Solway Firth.

Now, I find among the baronies which formed part of the great possessions of Ranulph de Meschines, in the reign of Henry the First, was the Barony of *Lyddale*, and that it consisted of the lands of Esk, *Arthuret*, Stubhill, *Carwindlaw*, Speersykes, Randslington, Eitin, Nicol Forest, and the English part of the Debateable Lands. This barony afterwards reverted to the Crown, and was granted by James I. to George, Earl of Cumberland, under the name of the Lordships of Arthureth, Liddel, and Randslington, within the Forest of Nicholl; and from Francis Earl of Cumberland passed to the Grahams of Netherby.

I consider that Arthuret or Arthureth is the same word as Ardderyd or Arderit, double *d* in Welsh being equivalent to *th*, and Carwindlaw is evidently the Carwanolow of Fordun.

It is here, then, that the site of the battle should be looked for; and I resolved to inspect the ground personally.

I took the railway to Hawick, and from thence I proceeded by rail up the Valley of the Slitrig, across the Catrail, and through the Maiden Paps by a tunnel, from which we emerged into Liddesdale, along which we rattled, sweeping past what proved afterwards to be the site in question, and past the junction of the Liddel with the Esk, till we came to Longtown, where I stopped, resolving to make it the point from which I should search for the site.

Longtown, the first stage on the great north road from Carlisle to Edinburgh and Glasgow, and formerly a bustling coaching little town, was now deserted and quiet, like a city of the dead; and I found the great coaching inn shut up, and an old mail-coach guard living with his wife and family in a corner of the deserted house. Though the sign of the Graham Arms was still hung, the landlady was so astonished at the sight of a traveller actually proposing to stay there for a day, that she hardly knew how to receive me. I found, however, that they kept an old dog-cart and a horse or two, which they hired occasionally; and, fortunately, the old retired guard was a native of the district, and knew the localities well. The poor people soon became reconciled to their

unexpected guest, and did everything in their power to make me comfortable, and to assist me in visiting the localities in the neighbourhood.

About a mile south from Longtown is the church and rectory of Arthuret, situated on a raised platform on the west side of the river Esk, which flows past them at a lower level; and south of the church and parsonage there rise from this platform two small hills covered with wood, called the Arthuret knowes. The top of the highest, which overhangs the river, is fortified by a small earthen rampart, enclosing a space nearly square, and measuring about 16 yards square. On returning to Longtown, I asked the old guard whether he knew of any place called Carwandlow. He said that Carwinelow was the name of a stream which flowed into the Esk from the west about three miles north of Longtown, and also of a mill situated on it, and that beyond it was a place called the Roman Camp. I asked him to drive me there, which he did. Proceeding north from Longtown, we passed Netherby, the seat of the Grahams, and then came to a ravine through which the burn of Carwhinelow flows from Nicholl Forest about six miles into the Esk. Here the road dipped down into the hollow, passed through the village and over the bridge of Carwhinelow, and rose on the other side, where we passed the farms of Lower and Upper Moat; the latter exactly at the junction of the Liddel and the Esk. Proceeding half a mile up the south bank of the Liddel we came to what is called the Roman Camp, and which, I found, was known by no other name in the country, though it is called in the "Statistical Account" the Moat of Liddel. It is situated on the top of a high bank overhanging the river. On the north side, the rock goes sheer down to the river. The highest point is about 160 feet above the river. On the other side it is defended by prodigious earthen ramparts, which rise from the field to a height of nearly 30 feet. The space enclosed by the great rampart measured about 38 yards from east to west, by about 55 yards from north to south. There is a small inner citadel measuring 13 yards by 9, and also a well in the enclosure, and on the west side there is a second great rampart.

I am sorry that I am not a draughtsman, and cannot lay before you a plan or sketch of this magnificent fort. It is obviously a native strength, and would well repay a visit. The view from it is magnificent.

Standing on the highest point and looking north, the river Liddel and the railway winds at the base of the rock under your feet. Looking north-east, the beautifully wooded vale of the Esk opens out before you, up which the eye carries you almost as far as Langholm, and the bare and pastoral valley of Liddesdale extends to the north-west. In the horizon, the top of Birrenswork hill, notable for its Roman camps, is most prominent. On the west the Solway Firth stretches before you; and looking due south, the eye rests upon the Arthuret knowes, and beyond them the chain of the Cumberland hills bounds the horizon.

On the east side of the fort the ground slopes down till it comes to the level of the river at a place called Ridding, not quite half a mile off. Between the fort and Carwhinelow is a field extending to the ridge along Carwhinelow, which is about half a mile off. This is the site indicated by Fordun, viz., the ground between Liddel and Carwhinelow. The old farmer of the Upper Moat, who accompanied us, informed me that the tradition of the country was that a great battle was fought here between the Romans, and the Picts who held the camp, in which the Romans were victorious; that the camp was defended by 300 men, who surrendered it, and were all put to the sword and buried in the orchard of the Upper Moat, at a place which he showed me. This part of the tradition is curious, as the Triads mention the Gosgord of Drywon-ap-Nudd at Arderyth which consisted of 300 men.

In the fortified know of Arthuret, I recognised the place called Ardderyd. The name of Erydon, which Merlin attaches to it as a name for the battle, probably remains in Ridding at the foot of the fort, and I have no doubt that the name Carwhinelow is a corruption of Caerwenddolew, the caer or city of Gwenddolew, and thus the topography supports the tradition.

II.

ACCOUNT OF THE RECENT EXAMINATION OF A CAIRN CALLED
"CAIRNGREG," ON THE ESTATE OF LINLATHEN. BY JOHN STUART,
ESQ., SEC. S.A. SCOT.

Some years ago, when describing an underground chamber and gallery on the Hill of Cairn Conan in Forfarshire, I adverted to existing tradi-

tions of a structure which they supposed to have stood on the same hill side, and which was known by the name of Castle Gory. This castle was attributed to a King Greg or Gregory, and I added some reasons for believing that an ancient rath or fort really had originally been placed above the spot occupied by the chamber.

The tradition of the country has always believed that this King Greg was buried under a cairn on the Estate of Linlathen, belonging to Mr Erskine,¹ in the neighbouring parish of Monifieth, which is known by the name of "Cairn Greg."

This cairn, which is placed on a rising ground commanding an extensive view of the surrounding country, was opened by Mr Erskine in the year 1834, in presence of the late Lord Rutherford (then Mr Rutherford), and Mr George Dundas, Advocate. It was found to contain a central cist, in which no remains appeared except a bronze dagger and a small urn. These were removed to the house of Linlathen, where they have been preserved since that time. A fragment of a sculptured stone was found between the covers of the cist, and was replaced when the cairn was closed up. Having recently heard that this fragment had on it figures resembling some of those on our sculptured pillars, I was desirous to have an opportunity of examining it. For this purpose, Mr Erskine was so obliging as to open up the cairn a second time, and an inspection of it took place in the month of August last, in presence of Mr Erskine, Mr Neish of Laws, Mr Paterson, Mr Cosmo Innes, the Rev. J. Gerard Young of Monifieth, Mr Joseph Robertson, and myself.

Alexander Brymer, a mason, who took part in the operations at the first opening, and who recollected the incidents of it very distinctly, was also present.

The cist now again exposed, was found to rest on the natural surface of the ground. It was formed of great slabs of freestone, much honey-combed by the action of water. The bottom of the cist was paved with

¹ A little North from Linlathen is a large heap of stones called "Cairn Greg." A local chieftain famous in ancient Scottish Story is said to have fallen in battle here. His name was Greg or Gregory, and the place of his residence near Colliston, in the parish of St Vigeans, is still known by the name of "Castle Gory." Numerous other cairns within the circuit of a mile around the principal one mark the burial place of the other slain.—*New Stat. Acc. of Forfarshire*, p. 546.

small water-worn pebbles, and the top was covered by an enormous slab of freestone, also honeycombed, measuring about 7 feet in length, by 4½ in breadth. On this rested another cover of still greater size and weight, which was cracked into two pieces.

The direction of the cist was east and west. It measured 4 feet 10 inches in length by 2 feet 9 inches in breadth, and 2 feet 10 inches in depth. When it was opened in 1834, a small urn, lying on its side, was found about the centre of the south side, and near the west end a bronze dagger appeared. Between the two great covering slabs there occurred a layer of earth, perhaps a foot in depth, and in it was the fragment of sculptured stone already referred to. From its appearance it seems obviously to have formed part of a larger stone, which had been broken across. A large ball of stone, about the size of a twenty-five pound cannon ball, was found somewhere about the cist, but the exact spot could not be recollected. The stone was brought to Linlathen at the time, and was subsequently lost.

The joints of the slabs forming the cist were plastered with clay, on which the marks of the thumb which had pressed it remained, and were observed in 1834. Portions of the clay so marked, were still to be seen at the recent examination.

Many stone cists were found in the adjoining fields, and were used in the construction of drains.

The evidence as to the spot where the sculptured fragment was found in 1834, rests on the recollection of Alexander Brymer. That, however, was remarkably minute; as an instance of which I may mention, that on my questioning him about the bronze dagger (which at the moment could not be found), he described its appearance very accurately, especially dwelling on the fact that it was rather square-shaped at the point. In any event, it cannot be doubted that the sculptured fragment was found in connection with the cist.

There is no reason for supposing that the cist had been opened prior to 1834, or that the sculptured fragment could have been introduced at a period subsequent to its first arrangement, as the cairn was apparently untouched until the neighbouring dykes began to be built in recent times.

The inference from these circumstances would be, that at the time

when the cist was formed, the sculptured fragment was part of an older monument, which probably had been on the spot.

If this inference be well-founded, the result would come to tell in any discussion relating to the date of the pillars with similar sculptures, for we could not doubt that they were at least contemporary with, if not earlier than, people who used bronze, and buried their dead in cists under cairns.

It will be observed that the fragment has on it the figure of the animal which has been called an elephant, and is merely in outline. It thus appears to have been one of a class of rude pillars, with similar sculpture, some of which have been found still standing on sepulchral cairns, as at Keilor in Angus, and at Inch in Aberdeenshire. These pillars are unhewn, and bear other marks of having preceded the cross slabs found so frequently in the same districts with the pillars. The elephant, and other objects which appear in outline on the latter, are filled up on the cross slabs with intricate figures, which imply, both in design and execution, a considerable progress in art.

Although there seems to be nothing apparently anti-Christian in the figures on these pillars, yet they have not been found in other parts of Christendom, throughout which various symbols of the Christian faith were diffused from the earliest times.

The position of some of them on sepulchral cairns seems also to assign them to a pre-Christian people, when taken in connection with other circumstances, and the occurrence of the fragment at Cairngreg in connection with a cist of the character already described, harmonises with such attribution.

The discovery of silver relics in or near the sepulchral mound of Norries Law at Largo,—on some of which relics figures of the same class as the elephant were engraved,—has a bearing on this point, to which I hope to revert when describing an excavation of that mound made in the course of the last summer.

The mere occurrence of burial under a cairn may not of itself in all cases be held to be conclusive evidence of its pagan character. But, as I recently observed, in describing the graves at Hartlaw, the idea of the Christian system required from the first that the bodies of the faithful should be laid in the consecrated cemeteries around the church.

We can trace the practice of consecrating cemeteries in Scotland to the time of St Ninian; and the Southern Picts, in whose province Cairnreg is placed, were converted by him.

We read, no doubt, of the burial of a converted Pict under a cairn in the time of St Columba. This was in the Isle of Skye, and may have taken place before a cemetery was consecrated,¹ but we may gather from various sources, that burials in cairns and sites of old usage (such as the great burial places in Ireland) were abandoned, and regarded as heathenish, from the first knowledge of the Christian system.

The occurrence of an urn with a weapon of bronze in the cist at Cairnreg, must be held to mark the burial there as one of heathen character.

The absence of any trace of bones in this instance leads to the conclusion that the remains were burned.

In a group of cists under a cairn at Warrackstone in Aberdeenshire, recently examined, a small urn was found in most of them without any appearance of bones. But in other spots of the area of the cairn, great traces of burning were observed, and two urns filled with calcined bones were found. Similar vestiges of burning and of burned bones were found at Norries Law; but as our attention was confined to the central cist at Cairnreg, the surface was not turned up so as to lead to the detection of any traces of burning which may have been there.

It has been suggested that the non-appearance of bones in such cists is frequently to be attributed to their complete decay and absorption in the soil. In the case of Cairnreg this could hardly be the case, as the dry-paved bottom would have hindered any such operation; and in the cists at Warrackstone, the pure yellow subsoil had not a trace of discoloration, such as the decay of animal matter produces.

It may be impossible to suggest a date for Cairnreg, but it does not seem rash to ascribe it to a period before the sixth century. Indeed, the urn found in the cist is of the rude unskilful type usually ascribed to a primitive period.

Our annals make us acquainted with a King Grig, who, along with Eocha, reigned over the Picts and Scots towards the end of the ninth century. It is possible that the traditional King Greg, who lay under the cairn on

¹ Life of St Columba, Rev. p. 62.

the dry knoll at Linlathen, may have been the predecessor of that "Duf-syth of Conan," who meets us in charters of the twelfth century,¹ and as such have been the chief of a Pictish tribe or clan like those alluded to in the "Book of Deir," as existing in Buchan, when Bede was Mormaer of that country—but if so, he must have lived at a period long before that of his historical namesake, who, after dying at place called by our chroniclers "Dundorne," and "Dornedeore," which has been sometimes identified with Dunadeer, was, according to their statements, buried at Iona, his epitaph remaining, as Wyntoun tells us, to be read in his days.²

III.

NOTICE OF THE FORT ON CAIRBY HILL, AND OTHER ANTIQUITIES IN LIDDLESDALE, IN A LETTER TO MR STUART, SEC. S.A. SCOT. BY THE REV. JOHN MAUGHAN, A.B., RECTOR OF BEWCASTLE, CUMB.

The remains, which occupy the site called Cairby Hill, cover a very high conical eminence, with a steep, and in some parts a rugged ascent. The site leads one at once to suppose that it had been selected by the original occupiers not only as a place of safety, but from aspirations to the home beyond the skies. The position is one of very great strength, and commands an extensive view on all sides. The conical high hill rises with a very steep incline of about 300 or 400 yards from the summit of a high ridge of ground formed by the junction of the rivers Liddle and Kershope—the latter river forming the present boundary between England and Scotland. The Kershope forms a deep narrow glen or gorge on the south side of Cairby Hill, and is one of the wildest passes of the Borders. On the north side of Cairby Hill is Liddlesdale, so celebrated in Border history! The etymology of the word Cairby Hill is significant of its original purport. The word, "caer," leads to the presumption that it was at first "a city" of the ancient Celto-British. This assumes a pre-historic occupation of the country. The word "by" leads to the inference that it was afterwards occupied by the Norsemen, of whom we find so many traces in this district. It may also be observed that the ancient name is

¹ Reg. de Arbroath, pp. 40, 162.

² Cronykil; vol. i. p. 174.

still retained in the word "Kershope," or "Kersop," the modern name of the farm in which it is situated. The remains now consist of an irregular circle of loose stones, most of them of small size. This circle is about 100 yards in diameter, from four to five yards broad, and has no appearance of mortar of any kind, although there is abundance of lime and other materials in the district, thus raising an hypothesis that our Celtic forefathers were ignorant of the use and importance of these materials in the construction of their fortresses and other dwellings. In this outer circle there are four gateways, each of them opposite to one of the four cardinal points of the compass; and within this curtain rampart we find twelve smaller circles of loose stones, the largest of them about 30 feet in diameter. These we may assume to have been the dwelling-houses of the principal families; in other words, the barracks of the fortress. This construction has a striking resemblance to the descriptions given by Diodorus Cæsar, and other early historians of the houses in Britain. In the smaller circles the ring is now perfect and unbroken, as if they had been originally without doors at the bottom, a hole higher up serving the purposes of chimney and window as well as a doorway. This peculiarity of configuration, I believe, closely corresponds with the accounts given by former historians of the want of all social comforts in these dark abodes of the ancient Celts. The site of this city is founded on a rock, as the crags rise above the surface in several parts of the interior, and sometimes form a floor to the house. Hundreds of cart-loads of stones were led away, about forty years ago, to build the stone walls of the adjacent fields, so that there is now nothing more than the mere debris of the rampart by which the city was surrounded and defended. The fortress in its general appearance resembles the British cities of Ingleborough, Carn-Engley, Birdhope, Wool-law, Carrock-fell, and the celebrated Arthur's Round Table. The works on Cairby Hill are supposed by many in the district to be Roman, but I can find no Roman vestige about them. Some even attribute them to Michael Scott and his satanic agent. In my opinion, everything bears a decided British impress, and hence I assume their British origin. The historians already mentioned, whose authority on such a question cannot be doubted, tell us that the cities of the ancient Britons were generally erected on some almost inaccessible hill or promontory, and a better site than Cairby Hill

could not have been selected in this district,—none which commands a more extensive prospect. On the slope of the hill, at the distance of about 400 yards, is a green flat eminence called the “battle-knowe,” where, it is said, a severe battle was fought in former times, but of which I can learn no particulars. At the foot of Cairby Hill lies the “day-holm of Kershope,” Mangerton, Stonegarthside, and Whithaugh Towers, and many other places of cherished memory in the border lore of Liddesdale and Kershope.

The works on Kirkhill occupy the summit of another high and conical eminence on the north side of the river Liddle, about three miles from Cairby Hill, and directly opposite to it. This relic is merely a dyke or rampart of earth and stone, and nearly circular—now covered with green turf. It has been formed by the materials thrown up in forming the deep ditch by which it is surrounded. There is also a smaller ditch within. The circle is about 100 yards in diameter, and in some places about 10 or 12 feet high. A modern stone wall runs through the centre of the enclosure from east to west, and the hill falls away from each side of the wall, giving the enclosure an oval appearance, although it is in reality very nearly, if not quite circular. There has been an entrance on the south side, and the ditches have been discontinued here. This circle probably belonged to the Druidical system of religion,—a circular temple of considerable size dedicated to the worship of Apollo, or the Sun. It resembles Maybrough, near Penrith; and they may have been two minor temples, connected with Long Meg, the mother church of the district. The modern name leads to the inference that the original design of these remains was a place of sepulture and religious worship. “Kirk” is probably a corruption of the words “cir” and “rock”—“a circle of stones”—denoting and referring to the form of construction adopted by the ancient Druids. On the slope of the hill, but considerably lower down, we find the groundworks of Ettleton Chapel, where there is a place of sepulture still generally used as a burial-place by the inhabitants of the district, who, becoming wiser in their generation, have chosen the more accessible place as the last home of their departed friends. In Ettleton kirkyard were deposited the remains of the Lord of Mangerton, whose murder was so foul a blot on the chivalry of Hermitage. The cross of Lord Mangerton is still standing at the foot of the

hill, a little way below the kirkyard of Ettleton. On the south-western slope of Kirkhill are the groundworks of the dwelling-place of the notorious Jock o' the Side, whose exploits form so conspicuous a portion of Border history. Although neither the cromlech, nor the pedestal for the Deity, are now to be found in the circle at Kirkhill, yet I find a sort of ancient tradition that there was once a cromlech somewhere in this locality, although the precise site cannot now be pointed out. The ring of the circle is now much lower and smaller than it was, as a great quantity of its stones have been carted away to build the adjacent fences; and I think it not unlikely that for some such vile and inferior purpose the cromlech or gravestone, which was here originally raised to commemorate the burial-place of some distinguished Celtic chieftain, has been broken up and desecrated. From the accounts given us by Diodorus Siculus of the circular temples in which Apollo was worshipped by the ancient Druids, I am induced to suppose that the circle on Kirkhill was once not only a place of sepulture, but a temple in a complete state, associated with all the mysterious legends of a complicated mythology, and endowed with all the usual privileges of the sanctuary.

The Flight Camp is situated on a large flat moorland about three or four miles higher up the river Liddle than Kirkhill or Cairby Hill. The site is low, but commands an extensive prospect. It is probably the camp to which Stuart alludes in the "*Caledonia Romana*." The groundworks of the modern Border towers, called Flight Castle and Clintwood Castle, are a few hundred yards on the south-west and south-east of it—all in the parish of Castleton. The camp is a small square, strongly fortified, about 50 yards in the outside. It consists of a wide ditch, with a rampart on each side of it, the interior of the camp being about 40 yards square. Many of the later Border fortresses resemble it in form, and it may possibly have served as a model to succeeding builders. It is doubtful whether the exterior rampart has been anything more than a mound formed by the materials obtained in digging the fosse, but the interior rampart has evidently been formed of stone, and is now of an average height of 6 feet. The whole fortress is now covered with a thick deposit of green vegetation. The ditch and outer rampart are not very distinct on the north side, but the other sides still forcibly remind us of the strength of the Roman *prætenturæ*. This camp is frequently

called the "threshing-floor," and the tradition of the district says that the people of Liddlesdale used to bring all their corn here to be thrashed. From this tradition we may suppose that if a search were made, and the soil removed, a stone floor at least, if not some superior pavement, would still be found, a valuable record of the works of the Romans.

The other camp is situated to the north-west of the Flight Camp, on that part of the Dyke Row Farm, called Aislie Moor, and close upon the river Liddle. It is a short way above the old castle at Castleton, which I think has been the site of a large Roman station, to which these two minor camps have originally belonged. It is about 100 yards north of the turnpike-road leading from Castleton to Jedburgh, and close to a shepherd's cottage called Florida. This fort appears to have been similar in form and construction to the Flight Camp, and perhaps a little larger, but to what extent it is impossible now to ascertain, in consequence of the encroachments of the river. The fosse and ramparts have not been so broad as those at Flight, and its interior would in consequence be more commodious. It occupies a very commanding position, having the deep glen of the Liddle, with its rugged and precipitous banks on the north, and the deep glen of the Harden burn on the west. On the east and south sides the ground is nearly level, and on these sides the vestiges of the works are still distinct, but fast becoming obliterated by modern cultivation. In the centre and north side of the camp is a plantation, in which the traces of the fosse and ramparts are very visible and perfect. The north side has been washed away. In 1685, Claverhouse pitched his camp, it is said, on Aislie Moor during his residence in Liddlesdale, and very possibly his soldiers may have occupied the camp which previously was garrisoned by the Roman cohorts.

IV.

NOTE RELATIVE TO EXCAVATIONS AT BALGONE NEAR NORTH BERWICK. BY THE REV. JOHN STRUTHERS, F.S.A. SCOT., PRESTONPANS.

In the course of draining operations at the northern base of the crags of Balgone, $2\frac{1}{2}$ miles south of North Berwick, and within 300 yards or so of the Mansion House of Sir George Grant Suttie, Bart., a some-

what remarkable and extensive collection of bones of various animals has recently been discovered imbedded deeply in the moss. Some years ago, a little to the westward of the same locality, and at a slightly higher elevation of what appears to have been an ancient lake or morass, there were found a number of bronze culinary vessels, four with loops at the sides for handles, one with a long handle, two flagon-shaped and two shallow basins, both imperfect, which were transmitted to the Museum shortly afterwards.

The bones which have more recently been discovered were found lying on a nearly horizontal base, at a depth of between 6 and 8 feet of black moss, and with another foot of similar black moss beneath them, which again rests on a bed of soft marl, of between 4 and 5 feet in thickness. The locality is near to what seems to have been the outlet of the ancient lake, and the soil underneath the marl is composed of gravel and the debris of the rocks adjacent.

The bones consist of the antlers of deer—some of them very large—of boars' tusks, of the vertebræ and thigh and other large bones of oxen, horses, &c., and also of some human bones, including two very well preserved crania, which have been forwarded, through Sir Roderick Murchison, to Professor Owen of London. Several of the bones, of which one or two were exhibited, appear to have been formed into cutting implements; and another article, of doubtful use, of jet or bituminous shale, and similar to a jet ornament found in the Isle of Skye, now in the Museum. It is cylinder-shaped, with the ends rounded off, and measures 3 inches by 1 inch in diameter; in the centre is a long opening, and it has obviously had considerable labour bestowed in its fabrication.

MONDAY, 13th March 1865.

PROFESSOR J. Y. SIMPSON, M.D., Vice-President, in the Chair.

The following Gentlemen were balloted for, and elected Fellows of the Society :—

WILLIAM BROWN, Esq., F.R.C.S.E.

WILLIAM SIM, Esq., of Lunan Bank, Forfarshire.



Fig. 3.

(Height, 5½ inches.)

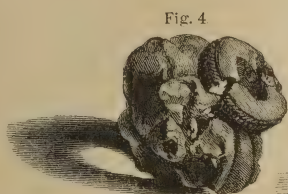


Fig. 4.

(Length, 1 inch.)
(Height, 1¼ inch.)

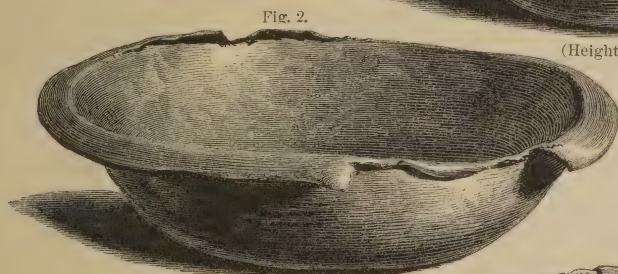


Fig. 2.

(Height, 3 inches.)

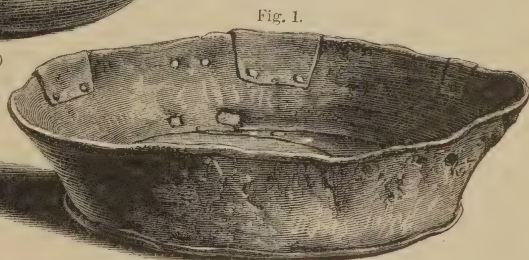


Fig. 1.

(Height, 4 inches.)



Fig. 5.

(Length, 7 inches.)

ARTICLES FOUND IN DOWALTON LOCH.

1, 2, 3. Bronze Vessels, and a Roman Patella. 4. Glass Bead, with Metal Core. 5. Portion of Ornamented Leather Shoe.

The following Gentlemen were elected Corresponding Members :—

REV. WILLIAM GREENWELL, Durham.

REV. EDWARD L. BARNWELL, Ruthin, North Wales.

(1.) By Sir WILLIAM MAXWELL of Monreath, Baronet.

Collection of Articles found in exploring a Crannoge, or Artificial Island in Dowalton Loch, Wigtonshire, consisting of a

Square-shaped Stone, 5 inches in length, 1 inch in breadth, and $\frac{5}{8}$ inch in thickness, and tapering to a point $\frac{5}{8}$ inch square; probably a whetstone.

Three Bronze Basins; one measures 10 inches in diameter and 4 inches in depth. It is formed of sheet metal, fastened by rivets, with portions of an iron handle. This pot or basin shows several patches or mendings. (See Plate X. fig. 1.)

Another Vessel of Bronze, measures 12 inches in diameter and 4 inches in depth. It appears to have been made by hammering it into shape out of one piece of metal.

The third Vessel measures 12 inches in diameter and 3 inches in depth, and is also formed out of one piece of metal. On its upper edge is a turned-over or projecting rim, 1 inch in breadth. (See Plate X. fig. 2.)

Pot or Patella of yellowish-coloured Bronze, with a handle springing from the upper edge, 7 inches in length, on which is stamped the letters CIPOLLEI; at the further extremity is a circular opening. The bottom is ornamented by five projecting rings, and measures in diameter 6 inches; it is 8 inches in diameter across the mouth; the inside appears to be coated with tin, and has a series of incised lines at various distances. The vessel is ornamented on the outside opposite to the handle by a human face, in relief surrounded by a movable ring which could be used in lifting the pot. (See Plate X. fig. 3.)

Bronze Ring, measuring $3\frac{1}{2}$ inches in diameter, which passes through a loop fastened to a portion of broken bronze, apparently part of the upper edge of a large bronze vessel, the ring having formed one of the handles.

Small, very rude Clay Cup or Crucible, $2\frac{1}{2}$ inches in diameter.

Bronze Implement, being a short tube 1 inch in length, with a projecting rim at one extremity, which is 2 inches in diameter. It is not unlike in shape to the socket portion of a modern candlestick.

Bronze Penannular Ring or Brooch, $1\frac{3}{4}$ inch in diameter, with bulbous extremities.

Small plain Bronze Ring, 1 inch in diameter.

Small portion of Bronze, probably portion of a vessel.

Small Bronze Plate or Ornament, 1 inch in length, having a projecting tongue at three of its corners, each projecting portion being pierced with a hole through in its centre.

Two Iron Axe Heads; one with a square-shaped head, which tapers to a sharp cutting face, and measures $6\frac{1}{2}$ inches long; it has a large perforation close to the square head for receiving the handle.

The other measures 6 inches in length. The perforation for the handle is near the centre; and one end has a sharp cutting face, the other a blunt rounded extremity, or head.

Iron Hammer Head, $8\frac{1}{2}$ inches in length, with hole in the centre for handle; the head is square, and tapers slightly to a blunt face.

Several masses of Iron Slag.

Wooden Boat Paddle, the blade measures 2 feet 4 inches in length, by 10 inches in breadth, and 1 inch in thickness. It has a short, rounded handle, measuring 7 inches in length.

Portions of Wooden Piles, several showing mortice cuttings.

Portions of the Common Fern or "Bracken" (*Pteris aquilina*), which formed the bed on which the Crannoge was built.

Half of a Ring, 3 inches in diameter, formed of white glass or vitreous paste, and streaked with blue.

Half of a similar Ring, formed of yellow-coloured glass or vitreous paste.

Large Bead, measuring $1\frac{1}{2}$ inch in diameter. The centre portion is formed of blue glass, of a ribbed pattern. The central perforation or opening is formed of a tube of bronze, and the edge of both sides of the perforation is ornamented by three minute bands of twisted yellow glass. (See Plate X. fig. 4.)

Bead of Earthenware, $\frac{3}{4}$ inch in diameter, of a ribbed pattern, and showing traces of green glaze.

Small Bead of Vitreous Paste, of a white colour with red spots, and measuring $\frac{1}{2}$ inch in diameter.

Amber Bead, $\frac{3}{4}$ inch in diameter.

Half of a Small Bead, measuring $\frac{3}{4}$ of an inch in diameter, of white glass streaked with blue.

Small portion of Blue Glass.

Portion of a Leather Shoe, measuring 7 inches in length, and $3\frac{1}{2}$ inches in its greatest breadth, nearly covered with ornamental stamped patterns. (See Plate X. fig. 5.)

Various Bones of Animals, &c.

(See Communication, page 121.)

(2.) By Colonel JOSEPH DUNDAS, of Carron Hall, F.S.A. Scot.

The following articles, found in excavating an underground chamber at the Tappoch, Torwood, Stirlingshire. (See details in Communication made to the Society by Colonel Dundas in a subsequent part of this Volume, page 114.)

Three irregularly shaped Blocks of Grey Sandstone, measuring 2 feet in greatest length, $1\frac{1}{2}$ foot in breadth, and 8 inches in thickness. On the upper side of one is incised two concentric circles, surrounding a projecting boss in the centre; on the second is a circle, and portions of two concentric circles, surrounding a cup-shaped indentation; portions of two similar circles are on the third stone. The outer circle measures in diameter from 5 to 6 inches.

Upper and Lower Stones of a Quern or Grain-rubber; the upper stone is of granite, and measures 12 inches in diameter, and is pierced with a hole in the centre, and also a hole at one side, apparently for the handle. The lower portion is oval shaped, and measures 20 inches by 16 inches.

Upper Stone of a Quern, measuring 16 inches in diameter.

Thirteen Water-worn Stone Balls, varying from $1\frac{1}{2}$ to 4 inches in diameter.

Two Oval Stones, with cup-shaped depressions on the upper surface; greatest length 4 inches, and 3 inches in breadth.

Oval-shaped Stone, measuring 5 inches in length by 4 in breadth, with a cup-shaped depression on each side.

Small circular Cup or Lamp of yellowish clay, measuring 3 inches in diameter, with a projection at one side, as if to form a handle.

Oblong Stone, with flattened sides and rounded ends, measuring 5 inches in length and 2 inches in diameter; apparently a whetstone.

Stone, polished on all sides, 3 inches long by 2 inches in breadth, and 1 inch thick; which may have been used as a burnisher.

Flat, Pear-shaped piece of Shale, having a hole at the narrow end; greatest length $2\frac{1}{2}$ inches, and breadth 2 inches. One side is covered with scratches of a Vandyked pattern.

Stone Ball, flattened above and below, $1\frac{1}{2}$ inch in diameter; it is pierced with a hole through the centre, and has a groove round its sides.

Two flat circular Stone Whorls or Buttons, with a hole in the centre; one measures 2 inches in diameter, and the other $1\frac{1}{2}$ inch in diameter.

Small portion of an Urn of coarse clay, probably a sepulchral urn.

Portions of Charcoal.

Various Teeth of the Ox, &c.

Iron Axe Head, 6 inches long, with a large hole for the handle; it tapers gradually in thickness from near the head, which is rounded, towards the face, which is imperfect.

Iron Hammer, with handle, both the head and handle being of iron; the back portion of the head is round, the other extremity terminates in a sharp point. The hammer-head measures $6\frac{1}{2}$ inches long, the handle is 12 inches long; and it has a hook for suspension at its extremity.

Portion of a Jar of coarse Pottery, showing remains of a yellowish-coloured glaze.

The two last articles were found outside of the entrance to the chamber.

(3.) By ARTHUR MITCHELL, Esq., M.D., Corr. Mem. S.A. Scot.

Portion of a Bronze leaf-shaped Sword, part of the handle and of the point being wanting. It measures $10\frac{1}{2}$ inches long by 1 inch in breadth. The portion of the handle that remains shows two small holes pierced on each side for fixing it to the bone or wooden handle. It was found in Dumfriesshire.

(4.) By JOHN ALEX. SMITH, M.D., Sec. S.A. Scot.

Portion of a small Bronze Candlestick, measuring 4 inches long. At the upper part is a cup-shaped portion, for receiving the candle, which is pierced with a square aperture at the side, in the middle of the stalk is an ornamental projecting ring. It was found, many years ago, in a moss near Denholm, Roxburghshire.

(5.) By GEORGE S. VEITCH, Esq., F.S.A., Scot.

Flat circular Brooch of Copper, measuring $1\frac{3}{4}$ inches in diameter; in the centre is a Monogram of the Letters **GD** in relief, which is surrounded by a border of leaves, and the letters **mad : ybu :** The brooch has apparently been enamelled. It was found in excavating the foundation for the recent extension of the Bank of Scotland, Bank Street, Edinburgh.

(6.) By D. H. ROBERTSON, M.D., F.S.A. Scot.

Iron Knife, with a narrow, rounded handle, and a curved razor-shaped blade; all in one piece. The blade measures $4\frac{3}{4}$ inches in length, and the handle, 4 inches in length, is ornamented by three groups of incised grooves encircling it, one at each extremity, and the third in the centre; the lower end is tapered off to a sharp four-sided point, each side of which is ornamented by an incised pattern. This razor-like knife is stated to have been found in a cairn at South Uist, Orkney.

(7.) By the Rev. J. G. BEVERIDGE, Minister of the parish of Inveresk, East Lothian.

Communion Tokens,—one, circular, on one side M. K. Musselburgh Kirk, on the other ^{Mr} R.H., for the Rev. Mr Richard Howieson, ordained 1690; three, square, 1727 I. W. in monogram, for the Rev. Mr John Williamson, ordained 1701, died 1739; another, oval in shape, on one side INVERESK KIRK, on the other Rev^d L * M. 1806, for the Rev. Leslie Moodie, admitted 1806, died 1840.

Denarius of Trajan, dug up in the manse garden, Inveresk.

(8.) By A. D. COWAN, Esq., through James Sinclair, Albany Herald. Large Wooden Saddle-Tree and Leather Crupper.

Pair of Turkish Stirrups of Steel, with large triangular sides, which are inlaid with silver, and ornamented with two brass studs on the outer surface.

(9.) By WILLIAM PAGAN, Esq., F.S.A. Scot. (the Author).

The Birthplace and Parentage of William Paterson, founder of the Bank of England, and projector of the Darien Scheme, with suggestions for improvements on the Scottish Registers. 12mo. Edin. 1865.

(10.) By the PRESIDENT AND COUNCIL of the Royal Scottish Academy Thirty-Seventh Annual Report of the Council of the Royal Scottish Academy of Painting and Architecture. 8vo. 1864.

(11.) By Miss CARNEGIE, Laverock Bank House.

The Scot's Magazine, containing a general view of the Religion, Politics, Entertainment, &c. in Great Britain; and a succinct Account of Public Affairs, foreign and domestick. 64 vols. 8vo. Edinburgh, 1739-1802.

(12.) By WILLIAM REEVES, D.D., Hon. Mem. S. A. Scot. (the Author).

The Culdees of the British Islands, as they appear in History; with an Appendix of Evidences. 4to. Dublin, 1864.

The following Communications were read :—

I.

NOTICES OF A GROUP OF ARTIFICIAL ISLANDS IN THE LOCH OF DOWALTON, WIGTONSHIRE, AND OF OTHER ARTIFICIAL ISLANDS OR "CRANNOGS" THROUGHOUT SCOTLAND. BY JOHN STUART, ESQ., SECRETARY SOC. ANT. SCOT. (PLATES X.-XIII.)

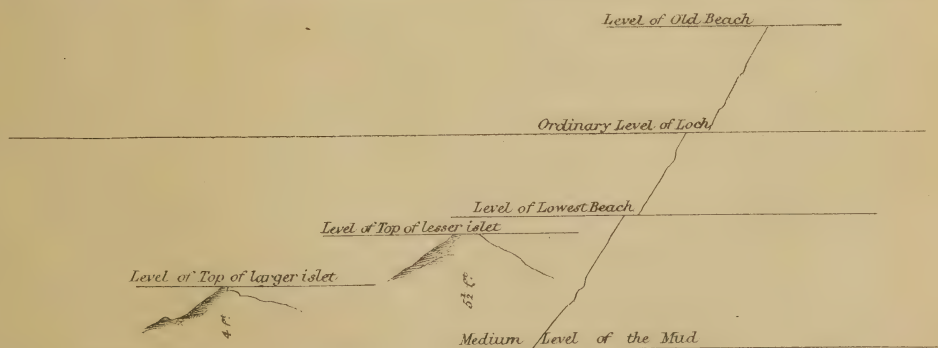
In December 1857, Mr Joseph Robertson read a paper to the Society entitled "Notices of the Isle of the Loch of Banchory, the Isle of Loch Cannor, and other Scottish examples of the artificial or stockaded islands, called Crannoges in Ireland, and Keltischen Pfahlbauten in Switzerland."

This paper was not printed in the Proceedings, in consequence of Mr Robertson's desire to amplify his notices of these ancient remains. Other engagements having prevented him from carrying out his design, he recently placed his collections in my hands, with permission to add to my account of Scottish crannogs, anything from his notes which I might care to select. Of this permission I have gladly availed myself, and the passages introduced from Mr Robertson's collection are acknowledged at the places where they occur.

J. S.

June 1866.

The late Loch of Dowalton, or, as it is called in the Survey of Timothy Pont in Blaeu's Atlas, the Loch of Boirlant, was situated in the centre of that district of Wigtonshire called The Machars—a peninsula bounded on the west by the Bay of Luce, and on the east by the Bay of Wigton.



PLAN SHEWING THE DIFFERENT LEVELS OF ISLANDS & BEACHES OF THE LOCH.

0 1 2 3 4 5 feet 10 15 feet

It was about five miles from the burgh of Whithorn, and occupied the lower end of a narrow valley of some five miles in length. It was environed by mosses on the east and west (those on the west extending a distance of four miles, under the names of Drummodie Moss, Drumscallan Moss, and others), which emptied part of their waters on the west end into the sea near Monreith, and the rest into the loch. The Moss of Ravenston is on the east of the loch, and there were rising grounds on its other sides. It was surrounded by the parishes of Kirkinner, Sorbie, and Glasserton, which met at a point in its centre. The old parish of Longcastle, now part of Kirkinner, is on its north-west side, and ruinous walls, of no determinate character, are yet to be seen on the islands called Longcastle, and Hern Isle, on the north shore of the loch. The loch was of an irregular form, about $1\frac{1}{2}$ mile in greatest length by about $\frac{3}{4}$ th of a mile in greatest breadth, without any marked outfall for drainage. Sir William Maxwell has recently effected this, by making a cut at its south-eastern extremity through the wall of whinstone and slate which closes in the valley. This cut is 25 feet in depth for some distance.

The water having been partially drawn off in the summer of 1863, the island abodes now to be described became visible. In the month of August of that year, some of them were examined by Earl Percy (then Lord Lovaine), who read an account of them to the meeting of the British Association held at Newcastle in the course of that month. At that time, however, the depth of water and mud only permitted a partial examination. About a year after this, I had an opportunity of examining these remains, when on a visit to Sir William Maxwell. By this time the whole bed of the loch was exposed, and all the islands were approachable, although in many places the great depth of quaking clay rendered it somewhat difficult to walk upon, and in some deep spots, where the clay was softer than elsewhere, even dangerous, from the risk of sinking.

The rough outline sketch (Plate XI.) will give an idea of the shape of the loch, and it will be convenient to describe the islands in the order in which they there occur, beginning at the west end; in doing so, I avail myself of the details in Lord Percy's paper.¹

The first is called Miller's Cairn, from its having been a mark of the

¹ Transactions of the British Association Meeting at Newcastle, 1863, p. 141.

levels, when the loch was drained by cuts for feeding neighbouring mills. One of these cuts is known to have been made at a remote period. It was still surrounded by water when the place was visited by Lord Percy in 1863. On approaching the cairn (Plate XI. fig. 1), the numerous rows of piles which surrounded it first attracted notice. These piles were formed of young oak trees. Lying on the north-east side, were mortised frames of beams of oak, like hurdles, and below these, round trees laid horizontally. In some cases the vertical piles were mortised into horizontal bars. Below them, were layers of hazel and birch branches, and under these were masses of fern, the whole mixed with large boulders, and penetrated by piles. Above all, was a surface of stones and soil, which was several feet under water till the recent drainage took place. The hurdle frames were neatly mortised together, and were secured by pegs in the mortise holes.

On one side of the island, a round space of a few feet in size appeared, on which was a layer of white clay, browned and calcined, as from the action of fire, and around it were bones of animals, and ashes of wood. Below this was a layer of fern and another surface of clay, calcined as in the upper case. A small piece of bronze was found between the two layers. On the top another layer of fern was found, but the clay, and the slab which probably rested upon it, had been removed. There can be no doubt that this had been used as a hearth. In one of the crannogs in Loughrea, in Ireland, the flag which formed the hearth-stone rested in the same way on a mass of yellow clay.¹

Near this cairn a bronze pan was found; and opposite to it, on the south and north margins of the loch, uprooted trees, mostly birch and alder, were seen, which had all fallen to the east. Hazel branches had been much used in the formation of the island, and many hazel nuts were found among the debris. In the layers, the leaves and nuts were perfectly distinct. The bark also remained, and the fern and heather looked as if recently laid down. The fern is the common bracken, of which in many places the fronds were quite perfect. In some places innumerable chrysalides of an insect occurred between the layers of fern; they are found to be those of a dipterous fly of the genus *Dicara*, closely allied to the "daddy long-legs."

¹ Proceedings of the Royal Irish Academy, vol. viii. p. 421.

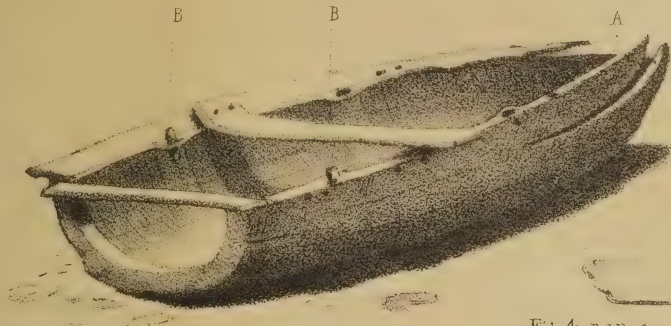


Fig. 1. CANOE

21 feet long
2 " deep
3 " broad

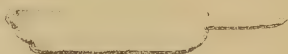


Fig. 4. Raddle found in Ravenstone Moss.

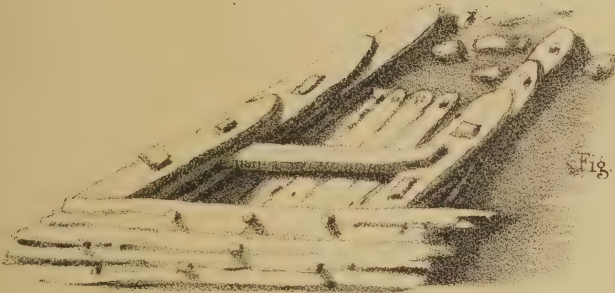


Fig. 2. Form of Supposed Breakwater.

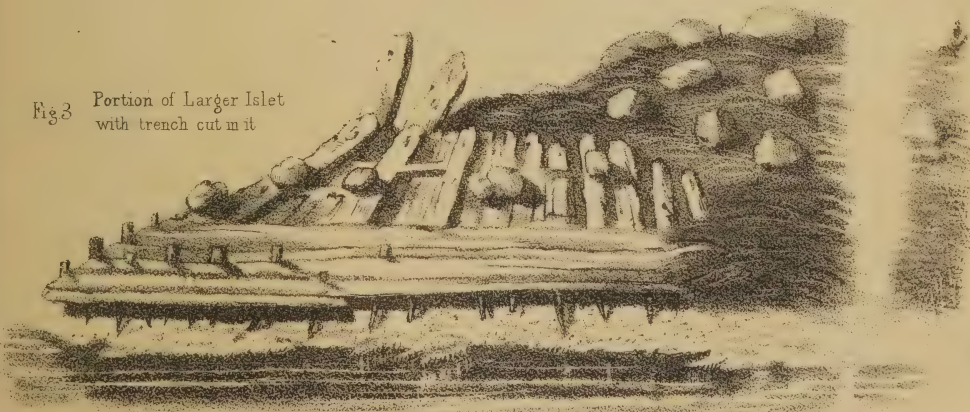


Fig. 3. Portion of Larger Islet with trench cut in it

In the vicinity of this cairn is a ridge of rock which *might* have formed the nucleus of a superstructure, but it was not used. Miller's Cairn was much dilapidated. Lines of piles, apparently to support a causeway, led from it to the shore.

The next in order is the largest island (Plate XI. fig. 2). Lord Percy succeeded in reaching it in a boat in 1863. It appeared to him to be 3 feet below the level of the other islands, and, from several depressions on its surface, to have sunk. The progress of excavation was, however, soon checked by the oozing in of the water. On the south side of the island great pains had been taken to secure the structure; heavy slabs of oak, 5 feet long, 2 feet wide, and 2 inches thick, were laid one upon another in a sloping direction, bolted together by stakes inserted in mortises of 8 inches by 10 inches in size, and connected by square pieces of timber 3 feet 8 inches in length. The surface of the island was of stones, resting on a mass of compressed brushwood, below which were branches and stems of small trees, mostly hazel and birch, mingled with stones, apparently for compressing the mass. Below this were layers of brushwood, fern, and heather, intermingled with stones and soil, the whole resting on a bed of fern 3 or 4 feet in thickness. The mass was pinned together by piles driven into the bottom of the loch, some of which went through holes in the horizontal logs. The general appearance of the island, and of the mortised beams on its south side, will be gathered from the sketches engraved on Plate XII. figs. 2 and 3. For these sketches I am indebted to the courtesy of Lord Percy. I noticed some of these flat beams of great size and length (one of them 12 feet long) with three mortise holes in the length, 7 inches square. A thick plank of oak of about 6 feet in length, had grooves on its two edges, as if for something to slide in; and it may be noted that some of the oak beams in the Irish crannog at Dunshaughlin, county of Meath, had their sides grooved in like manner, to admit large panels driven down between them.¹ This island measured about 23 yards across, and was surrounded by many rows of piles, some of which had the ends cut square over, as if by several strokes of a small hatchet. Mr Chalmers, the intelligent overseer of Sir William Maxwell, pointed out to me vestiges of branches interlaced in

¹ Wilde's Catalogue of Antiquities in Museum Royal Irish Academy, p. 222.

the beams of the hurdles. On the north-east side, and under the superstructure of the island, a canoe was found, made of a single tree of oak. It was 21 feet in length, 3 feet 10 inches across over all near the stern, which was square. Its depth at the stern was 17 inches, or, including the backboard which closed the stern, 20 inches. The stern was formed by a plank inserted in a groove on each side, with a backboard pegged on above it. The part containing the grooves was left very thick. There were two thole-pins on each side, inserted in squared holes in the solid, which was left to receive them, and wedged in with small bits of wood. One thwart of fir or willow remained. A plank or wash-board, projecting a few inches over the edge, ran round the canoe. It rested on the top, and was fastened with pegs into the solid. The vessel was pointed at the bow, and the sketch, for which I am indebted to Lord Percy (Plate XII. fig. 1), will give a general idea of it. As I have said, it was found in the foundations of the island, with hurdles and planks above it. It was very complete, and in good order. In the mass of stuff thrown out, a piece of curiously stamped leather was found, apparently part of a shoe. Great quantities of the teeth and bones of animals were strewed over the surface of the island and surrounding mud. Bones were also found at different depths in the mass, but always below the upper layer of faggots, and towards the inside. All the bones were split, probably to admit the extraction of the marrow. Specimens of the bones were submitted to Professor Owen, who has expressed his opinion of them in the following note:—

“The bones and teeth, from the lake dwellings, submitted to my examination by Lord Lovaine, included parts of the ox, hog, and goat. The ox was of the size of the *Bos longifrons* or Highland kyloe, and was represented by teeth, portions of the lower jaw, and some bones of the limbs and trunk. The remains of the *Sus* were a lower jaw of a sow, of the size of the wild boar, and detached teeth. With the remains of the small ruminant, of the size of the sheep, was a portion of cranium with the base of a horn core, more resembling in shape that of the he-goat. Not any of these remains had lost their animal matter.—R. O.”

Other specimens of the bones presented by Sir William Maxwell are in the Museum. Regarding these I have been favoured with the following memorandum by Dr John Alex. Smith, Sec. :—

"After a careful examination of the bones now in the museum, found on an artificial island in Dowalton Loch, in which I was kindly assisted by Mr William Turner, M.B.; we find them to consist of those of small short-horned cattle—the *Bos longifrons*, I doubt not, of Professor Owen—similar to those found with Roman remains at Newstead, and presented by me to the museum—a rather small-sized pig, and the sheep; also a bone of a large bird. The mass of fern leaves forming the substratum of the dwelling consisted of the *Pteris aquilina*, the common bracken."

On one spot, a few flat stones were placed as if for a hearth. They showed marks of fire, and around them were ashes and bones. The bronze dish of Roman work afterwards described was found in the mud, near the east margin of the loch. The best saucepan was found between this island and the shore. A small circular brooch of bronze, four whetstones, and two iron hammers, were found *on* the island. A third iron hammer was found near it, and may have been thrown out with the debris.

Lumps of iron slag were also found on this island, and similar masses have been found on several of the Irish crannogs.

The original depth from the surface of the island to the bottom, was probably from 6 to 7 feet; but the structure was much dilapidated before I saw it.

Proceeding southward, we come to the island first examined by Lord Percy (Plate XI. fig. 3). It proved to be nearly circular, and to be about 13 yards in diameter. Its surface was raised about $5\frac{1}{2}$ feet above the mud, and on each side of it were two patches of stone nearly touching it. These, probably, answered the purpose of the jetty or pier, formed of a double row of piles, about 8 feet asunder, which supported horizontal logs, noticed on one side of the crannog in Cloonfinlough.¹ On the north side lay a canoe of oak, between the two patches, and surrounded by piles, the heads just appearing above the surface of the mud. It was 24 feet long, 4 feet 2 inches broad in the middle, and 7 inches deep, the thickness of the bottom being 2 inches. Under the stones which covered the surface, teeth of swine and oxen were found. A trench was cut round the islet, and at the south end a small quantity of ashes was turned up, in which were teeth and burned bones, part of an armlet of glass

¹ Proceedings Royal Irish Academy, vol. v. p. 209.

covered with a yellow enamel, and a large broken bead of glass, together with a small metal ornament; two other pieces of a glass armlet, one striped blue and white, were also found on the surface. These objects were found on the outside of the islet, about 2 feet from the surface. On cutting into the islet itself, it proved to be wholly artificial, resting on the soft bottom of the loch, and in its composition exactly the same as the large island already described. The whole mass was pinned together by piles of oak and willow, some of them driven $2\frac{1}{2}$ feet into the bottom of the loch. The islet was surrounded by an immense number of piles, extending to a distance of 20 yards around it; and masses of stone, which apparently were meant to act as breakwaters, were laid amongst them. On the sinking of the mud, a canoe was found between the islet and the northern shore. It was $18\frac{1}{2}$ feet long, and 2 feet 7 inches wide. A block of wood cut to fill a hole, left probably by a rotten branch, was inserted in the side, 2 feet long, 7 inches wide, and $5\frac{1}{2}$ inches thick, and was secured by pegs driven through the side; across the stern was cut a deep groove to admit a backboard; in both canoes a hole 2 inches in diameter was bored in the bottom.

The next islet is about 60 yards from the last, and nearer to a rocky projection, on the south margin of the loch. It was examined by Lord Percy, and was found to be smaller; the layers were not so distinctly marked, and some of the timbers inserted under the upper layer of brushwood were larger, and either split or cut to a face. A stake with two holes bored in it about the size of a finger, a thin piece of wood, in which mortises had been cut, and a box, the interior of which was about six inches cube, with a ledge to receive the cover, very rudely cut out of a block of wood, were found. I saw this rude box, but it has gone to pieces since that time.

On the south-east side of the loch, near one of the little promontories, were several cairns surrounded by piles, of which the outline had mostly disappeared at the time of my visit. When they were first seen by Lord Percy, there were six structures of the same character as those already described, arranged in a semicircle. They were, however, much smaller than the others, and appeared to have been single dwellings. Though upon some of them charred wood was found, nothing else was discovered except a mortised piece of timber, which might have been drifted there;

and in one, inserted under the upper layer of brushwood, a large oak beam, measuring 8 feet long by 3 in circumference.

This group of small islets was close to the shore. They had, however, been surrounded by water at the time when the level of the loch reached the highest beach mark. I could not discover any causeway or piled connection with the shore.

Near the north margin of the loch, a canoe was found in the mud. It measured 25 feet in length, and was strengthened by a projecting cross band towards the centre, left in the solid in hollowing out the inside; lying under it a portion of another canoe was found. Along this shore many uprooted trees occur in the mud, mostly birch and alder; some trees also are still rooted.

The articles already found on the islets and neighbourhood are:—

- | | |
|--|---|
| 1. Bronze dish, with handle, of Roman work. | 8. A bead of amber. |
| 2. Two bronze dishes, hammered out of the solid. | 9. A bead of vitreous paste. |
| 3. A smaller bronze dish of separate pieces, rivetted together. | 10. A small brooch of bronze. |
| 4. A bronze ring, having attached to it a portion of the vessel of which it had been a handle. | 11. A small ring of bronze. |
| 5. Fragment of leather, with a stamped pattern on it. | 12. A copper coin. |
| 6. A large blue glass bead. | 13. Five querns. |
| 7. Two glass beads, with streaks and spots. | 14. A fragment of bronze. |
| | 15. Pieces of iron slag. |
| | 16. A small earthen crucible. |
| | 17. Whetstones. |
| | 18. Three iron hammers. |
| | 19. Portions of armlets of enamelled glass. |
| | 20. Five canoes. |

Most of the articles were found in the neighbourhood of the islands. It is probable that the bronze vessel found near the eastern margin, as well as other articles, may have been floated off during the period when the islands were submerged. It is plain, from the appearance of several beaches of rolled stones around the margin of the loch, that the waters had stood at different levels at different times,—at one time 6 or 7 feet above its last level, to which it was reduced by three successive cuts made to feed neighbouring mills,—one of them certainly of great antiquity.

When at this height, the surface of the mosses to the west must also have been under water. Lord Percy has remarked, that at $3\frac{1}{2}$ feet below the ordinary level, there are unmistakable appearances of a former beach, with which the top of the islet, first examined by him, coincides. Sir William Maxwell suggests, as an easy explanation of the different levels found in the loch, that the waters originally discharged themselves into the sea from the western end of the valley, and at last, in consequence of the formation of moss towards its centre, *a part* of them could only escape in that way, while the remainder was forced into the loch. On this assumption, Lord Percy concludes that the structures must be supposed to have been formed in the early stages of the growth of the moss, while the loch was so shallow as to make it easy to raise the obstructing moss above its waters, and yet deep enough to float canoes and afford the desired security from an enemy. He adds that it is difficult to conjecture the state of the loch when these edifices were formed, and whether or not they were completed at one period. The finding of the large stones in the lower layer of ferns might, he thinks, lead to the belief that they were gradually raised as the waters of the loch increased; and that the strengthening them by breakwaters might be held to prove that the loch had risen considerably before they were abandoned.

The rising of the level of the loch is a feature common to this with the Irish lochs, in which crannogs have been found. In some Irish cases there are appearances of these having been raised to meet this change of circumstances; but when we consider the compressible nature of the materials, it is more likely that the islands may, in many instances, have required such heightening from the effect of natural subsidence. The stones among the lower strata of fern were probably used to compress and solidify the substructure in the course of erection, and it seems to me most probable that the islets were wholly erected at one time.

It would appear that no islets were above the surface of the water at the time of Pont's survey, about the middle of the seventeenth century. In Blaeu's map of Galloway no islets are seen on the loch of Dowalton, while several are laid down in the neighbouring loch of Mochrum, which shows that such projections were not overlooked.

In the moss of Ravenston, a little to the east of Dowalton, five paddles

of oak were discovered lying close to a mass of timbers about 6 feet under the surface. Lord Percy was led to believe that these were the remains of a structure similar to those in the loch of Dowalton. One of these paddles forms part of the donation of Sir William Maxwell to the Museum (Plate XII. fig. 4).

In the White Loch of Mertoun (a name which reminds us of the Cluain-fin-lough in Roscommon, which is said to mean "the enclosure of the White Lake"), about three miles westward from Dowalton, there was formerly a stockaded island. The discovery of the islands in Dowalton Loch, brought to the recollection of an old man in the service of Sir William Maxwell, that when the loch was partially drained by Sir William's grandfather, he had seen a small island in it with timbers, piles, and flat stones on its surface. This led to an examination of the island, from which it appeared that it was surrounded by piles, and was constructed, like those at Dowalton, of layers of furze, faggots and brushwood, layers of fern, &c. This island, prior to the lowering of the loch, had been covered by eight feet of water.

On Dunhill, which is a rising ground a short way from the south-east end of Dowalton Loch, there remains a circular rath, surrounded by a deep ditch. The rath is about 36 yards in diameter. Similar elevations occur on the north and south-west sides of the loch, where raths may also have been placed, but if so, they have been obliterated by cultivation.

It will be remarked that no weapon or tool of stone has as yet been found at Dowalton; but no certain inference can be drawn from this, as such objects, with many others, may yet be found below the deep bed of clay surrounding the islets.

Of the bronze objects which have been discovered, one is a dish of Roman work, with a stamp (apparently CIPOLIE), on the handle (Plate X. fig. 3). It measures $8\frac{1}{2}$ inches in diameter at the mouth, and 6 at the bottom. Its depth is $5\frac{1}{2}$ inches. The handle is 7 inches long, and there are five raised and turned rims on the bottom. It is turned in the inside, in which respect, as well as its general appearance, it resembles a bronze patella found in Teviotdale, presented to the National Museum by Dr J. A. Smith, and figured in the Proceedings of the Society (vol. iv. p. 598).

Two vessels of the same character, the one within the other, were found

in a moss near Friars Carse in Dumfriesshire, in 1790. The largest one has engraved or stamped on its handle the letters ANSIEPHARR. They are figured in the *Archæologia*, vol. xi. p. 105. Another similar vessel, which formed one of a remarkable collection of ornaments of the Roman period, found in the county of Durham about the beginning of last century, now in the British Museum, has on its handle the letters MATR · FAB · DVBIT.¹

Other two bronze dishes have each been hammered up into form out of a single piece, and to one an iron handle has been rivetted. They resemble bronze culinary dishes found at Rodingfield, in Essex, figured in *Archæologia*, vol. xvi. p. 364. They are about 14 inches across by 3 or 4 in depth, and one of them is figured on Plate X. fig. 1. A third is formed of two separate pieces welded together. It has obviously been much used on the fire, and bears many marks of rude mending by rivets. It has had an iron handle for lifting it, and it measures 10 inches across by 3 in depth. (See Plate X. fig. 1.)

The iron hammers have a great resemblance to those found with Roman remains at Great Chesterfield, in Essex, in 1854, and figured in the *Archæological Journal* for 1856. Iron hammers of a somewhat similar shape have been found in some of the Swiss deposits. An iron hammer was found on a fortified island in Carlinwark Loch, and specimens occur in the Irish crannogs. The axes figured on the column of Trajan are generally narrow at one end, and expand into a wide cutting edge at the other, and do not resemble those found at Dowalton.

The ring of bronze has obviously been rivetted to another object of the same metal, of which a fragment remains. It so exactly resembles one of two rings attached to a large Irish caldron, presented to our Museum by the late Mr Leckie of Paisley, and to those of another caldron, formed of plates of hammered bronze, rivetted together with pins of the same metal, found under twelve feet of bog in the barony of Farney, in Ulster, and figured in Mr Shirley's "Account of the Dominion of Farney" (p. 185), that I cannot doubt of its having been originally attached to a vessel of the same description. A similar ring formed part of the mass of bronze relics dredged from the Loch of Duddingston.

The largest glass bead has a core of bronze, and is finely milled on a projecting band of yellow glass on each neck (Plate X. fig. 4).

¹ *Archæological Journal*, vol. viii. p. 37.

Such beads of glass, and amber, are often found in cists, and occasionally in Picts' houses.

Enamelled glass armlets, like those found at Dowalton, are of very rare occurrence. Two specimens are in the National Museum, of which one was discovered in the Flanders Moss, in Stirlingshire, and the other was found, with a necklace of jet hanging from it, in a sepulchral cairn at Boghead, near Kintore, in Aberdeenshire.

Part of a similar armlet was recently discovered in excavating one of the hut circles at Greaves Ash, in Northumberland.

The stamped piece of leather seems to have formed part of a mocassin or shoe (Plate X. fig. 5).

All these remains seem to be associated with an early period. The copper coin is of doubtful character, but does not appear to be of great age; as, however, it may have been dropped into the loch at any time, its occurrence does not disturb any inference which may be drawn from the general character of the deposits. The coin was found near the third small island.

The general plan of construction of Scottish crannog islands, was different from that of the crannogs in the Loch of Dowalton and the White Loch of Mertoun.

The island in the Loch of Forfar, known as Queen Margaret's Inch, was discovered in 1781, on the partial drainage of the loch, when it lost ten feet of its depth. The island was formed in very deep water, by driving oak piles into the bottom, and heaping on them a prodigious quantity of stones, with a considerable stratum of earth above all. A layer of heather was laid below the stones; and the island which, about fifty years ago, measured about 450 feet in length by 150 in breadth, was surrounded by piles of oak. Dr Jamieson, who then described the structure, believed that it had been reached from the shore by a drawbridge, over a ditch which separated the island from the north side of the loch.

The drought of 1864 brought to light a sort of causeway, leading from the west end of the island. It was traced for about 100 yards; and it is supposed that it turned to the shore on one side, the popular belief being that it formed a way of escape in former times. As, however, it must have formerly been under a great depth of water, it seems doubtful for what purpose it may have been designed.

Two islands in Carlinwark Loch, in Galloway, discovered in 1765, are described as having been formed by strong piles of wood driven into the moss or marl, on which were placed large frames of black oak, covered with soil.¹ On inquiry, I learn that neither of them are now visible, being covered with mud, and, when the Dee flows into the loch, with water also, but that they are known to be composed of earth and stones, resting on oak beams.

The island in the Loch of Kinellan, parish of Contin, Ross-shire, is said to be formed of logs of oak, on which soil seems to have been heaped, till it emerged above the surface. It was of a nature to bear a house of strength, which came to be built upon it.²

Of this island, Mr J. H. Chalmers, advocate, Aberdeen, notes, in a letter to me,—

“The island has along the south, west, and north sides a rough facing or embankment of stones about as large as one strong man could lift. Inside this bulwark, at a distance of some feet from it, there may still be traced, more or less completely all round the island, the remains of an enclosing wall. Along the west side of the island are several wooden piles of oak driven into the bed of the loch, just outside the stone bulwark. The piles seem to have been squared; and one pile, which projected almost horizontally from the bulwark, had a hole in the end; holes also appeared in some of the vertical piles, suggesting the occurrence of mortising. Some large masses of rock, lying on the south side opposite the island, would seem to suggest that there had been a pier opposite to what was a landing-place on the island.”

The isle of the Loch of Banchory, Kincardineshire, was found to be composed of earth and stones, resting on a foundation of oak and birch trees, and was surrounded by oak piles.

The following interesting details of this crannog are taken from Mr Robertson's paper:—

“Before the recent drainage of the Loch of Leys—or the Loch of Banchory, as it was called of old—the loch covered about 140 acres, but, at some earlier date, had been four or five times as large. It had one small island, long known to be artificial, oval in shape, measuring nearly 200 feet in length by about 100 in breadth, elevated about 10 feet above the

¹ New Stat. Account, Kirkeudbrightshire, p. 154.

² Ibid., Ross-shire, p. 238.

Fig. 2.



(Height, 11 inches)

Found in the Loch of Banchory.

Fig. 3.



(Height, 9 inches.)

Fig. 1.



(Full size)
Found in the Loch of Forfar.

Fig. 4.



Found in the Loch of Banchory.

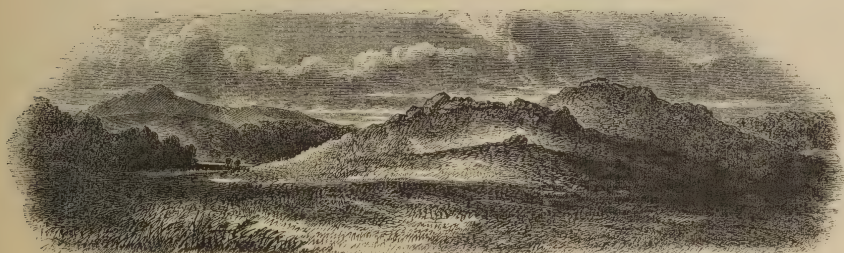
Fig. 5.



(Height, 10½ inches.)

Found in Loch Cammor.

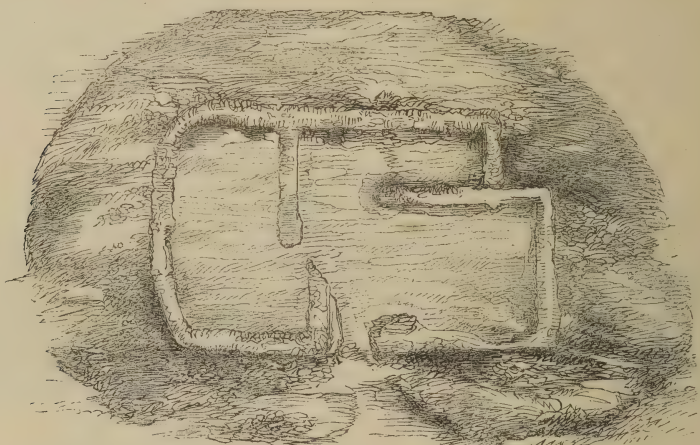
bottom of the loch, and distant about 100 yards from the nearest point of the mainland. What was discovered, as to the structure of this islet, will be best given in the words of the gentleman, of whose estate it is a part, Sir James Horn Burnett, of Crathes. In a communication which he made to this Society in January 1852, and which is printed in the first part of our Proceedings, he quotes from his diary of the 23d July 1850, as follows,—‘Digging at the Loch of Leys renewed. Took out two oak trees laid along the bottom of the lake, one five feet in circumference and nine feet long; the other shorter. It is plain that the foundation of the island has been of oak and birch trees laid alternately, and filled up with earth and stones. The bark was quite fresh on the trees. The island is surrounded by oak piles, which now project two or three feet above ground. They have evidently been driven in to protect the island from the action of the water.’



ISLE OF THE LOCH OF BANCHORY.—Fig. 1 (General View of Site).

“So far this exactly answers the description of the Irish crannog, and the resemblance is completed by the remains which were found below the surface. These were the bones and antlers of a red deer of great size, kitchen vessels of bronze, a millstone (taking the place of the quern in the Irish crannogs), a small canoe, and a rude, flat bottomed boat, about nine feet long, made, as in Ireland and Switzerland, from one piece of oak. Some of the bronze vessels were sent to our Museum by Sir James Burnett, and are now on the table. Here, too, are drawings of the place, for which I am indebted to the kindness of an accomplished lady of the neighbourhood. One shows the general appearance of the island as it now is, since the bottom of the lake was turned into corn

land. The other gives us a bird's-eye view of the surface of the crannog, which you will see had been occupied by a strong substantial building. This has latterly been known by the name of the Castle of Leys, and tradition, or conjecture, speaks of it as a fortalice, from which the Wauchopes were driven during the Bruces' wars, adding, that it was the seat of the Burnets until the middle of the sixteenth century, when they built the present Castle of Crathes. A grant of King Robert I. to the ancestors of the Burnets includes *lacum de Banchory cum insula ejusdem*. The island again appears in record in the year 1619, and in



ISLE OF THE LOCH OF BANCHORY.—Fig. 2 (Surface of Crannog).

1654 and 1664, under the name of 'The Isle of the Loch of Banchory.' Banchory itself, I may add, is a place of very ancient note. Here was the grave of one of the earliest of our Christian missionaries—St Ternan, archbishop of the Picts, as he is called in the old Service Books of the Church, which add that he received baptism from the hands of St Palladius. Along with St Ternan's Head and St Ternan's Bell, called 'The Ronnecht,' there was preserved at Banchory, until the Reformation, a still more precious relic, one of four volumes of the Gospel which had belonged to him, with its case of metal wrought with silver and gold."

The crannog in Dhu Loch, Isle of Bute, consisted of a surrounding wall, formed of double rows of piles, $4\frac{1}{2}$ feet asunder, the intermediate spaces having been filled up with beams of wood, some of which remain. The island within this external wall was formed of turf and moss covered with shingle.

An island in Loch Tummell is formed of stones resting on a foundation of beams, with a causeway leading to it from the side of the loch. There is a fragment of a stronghold on it, said to have been erected by Duncan the First of the Clandonachaidh, in which it is believed that King Robert Bruce and his Queen were sheltered during their wanderings.

An island in the west end of Loch Rannoch is believed to be formed of stones similarly disposed, on which there is a tower, erected in the present generation. There is a causeway leading to the island from the Strowan, or south side of the loch, which is said to be fordable in summer.

In Loch Kinder, in the parish of New Abbey, there is an artificial island. It is formed of stones which rest on a frame of large oaks.¹

In the Loch of Moy, Inverness-shire, is an artificial island, formed in the same way, of stones resting on piles. It is called Ellan-na-Glack, *the Stoney Island*.

The small island recently discovered in the Loch of Sanquhar was formed of beams of wood, supporting a quantity of stones, the whole being surrounded by piles. The crannog in Loch Canmor, Aberdeenshire, was formed by driving oak piles into the bed of the loch, and filling up the enclosed space with stones, crossed with horizontal beams.

Of the Irish Crannogs, we learn from Mr Mulvany, Commissioner of Public Works in Ireland, an attentive explorer of these remains, that the general constructive features are very much alike in all. They are surrounded by stakes driven generally in a circle, from sixty to eighty feet in diameter, a considerable length of the stakes projecting over the ground, and were probably joined together by horizontal branches interlaced so as to form a screen. The portions of the stakes which were above ground have been destroyed by time; but the portions

¹ Old Stat. Acc., Dumfriesshire, vol. ii. p. 139.

remaining below ground, particularly where the stratum is pure peat, are generally very sound at the heart, and have become as black as the oak usually found in bogs. The foundation within the stakes is generally of one or two layers of round logs, cut into lengths of from four to six feet, over which are layers of stone, clay, and gravel. In some cases, where the foundation is soft, the layers of timber are very deep. In other cases, where the ground is naturally firm, the platform of timber is confined to a portion of the island. In almost every case a collection of flat stones appears near the centre of the enclosure, having marks of fire on them, and apparently having served as hearths. In some cases several hearths have been found on one island. Considerable quantities of bones are generally found upon or around the island, being apparently those of deer, black cattle, and hogs; and, in almost every case, one or more pairs of quern stones have been found within the enclosure.¹

A section of one of the crannogs in Loughrea, county of Galway, shows at the bottom squared oak beams, above which is a layer of branches, and trunks of oak trees, then large stones, above which are layers of peat and marl, and above all a surface of loose stones laid in regular order.²

A section of another crannog in Tonymore Lough, county of Cavan, gives the following arrangement,—beginning at the surface, which was of clay; then ashes, with small stones and sand; next bones and ashes, with lumps of blue and yellow clay; then a quantity of grey ashes; and lastly horizontal beams and hazel branches resting on the peat bottom.³

Dr Reeves thus describes a crannog in Loughtamand, county of Antrim,—it was found to be formed of piles, from seventeen to twenty feet long, driven into the bed of the lough. They were bound together at the top by horizontal oak beams, into which they were mortised, and secured in the mortise by stout wooden pegs. Above the piles, was a surface of earth of several feet in depth, on which a stone house, which was said to have been a stronghold of the M'Quillans, was erected. Near the island a canoe was discovered, and there was also a paved causeway of stone leading from the margin of the loch to the island.⁴

¹ Proceedings R. I. A. vol. v., App. p. xlv.

³ Proceedings R. I. A. vol. viii. p. 277.

² Ibid. vol. viii. p. 414.

⁴ Ibid. vol. vii. pp. 155–156.

While the construction of the Dowalton Islands differs from that adopted in the Irish crannogs, and in other islands in Scotland, there are many points of analogy between them. The situation of Dowalton—a loch amid marshes and embosomed in wood—is that of most of the Irish structures. The rath on the adjoining height,—probably one of a larger number,—affords also an instance of agreement with the Irish plan. The concurrence of raths and crannogs in the same neighbourhood has been so often observed in Ireland, that the remains have come to be associated with each other, and it has been supposed that the islands were used as places of retreat for the dwellers in the raths.

In Tonymore Lough, in Cavan, are three crannogs, and the rising ground on either side is crowned with a rath, while lesser raths are in the neighbourhood. In Loughrea, county of Galway, are four crannogs, with twenty-one raths in the neighbourhood.

Cloonfree, one of the three lakes containing crannogs near to Stokestown, county of Roscommon, is close to the raths which formed the royal residence of the kings of Connaught; and around Ardakillin, another of these lakes, are three earthen raths.

It is probable that similar remains will be found in the neighbourhood of the Scotch lochs containing stockaded islands, where they have not been obliterated by cultivation; and that such island retreats are to be regarded as the centres of a neighbouring population.¹

¹ Since this passage was written, I have selected from Mr Robertson's Notes the following passages, descriptive of a crannog in Loch Lomond, which show its neighbourhood to a stone cashel on the shore, and preserve a tradition which ascribes the erection of both structures to the same hands:—

Graham of Duchray, writing in 1724, tells that the founder of a cyclopean *castel* called the Giant's Castle, on the north-eastern shore of Loch Lomond, built beside it an artificial island. "This Keith MacIndoill," he says, "notwithstanding the great number of natural isles in the loch, was, it seems, so curious as to found an artificial island, which is in the loch at a little distance from the point on which the old castle stands, founded on large square joists of oak, firmly mortised in one another, two of which, of a prodigious size (in each of which there are three large mortises) were disjoined from the float in 1714, and made use of by a gentleman in that country who was then building a house." The account of Buchanan of Auchmar, who wrote about the same period, is somewhat more circumstantial. "A small isle," he says, "lying at a little distance from the north shore of that loch, near a point of

It seems obvious that the crannogs both of Ireland and Scotland were, in their idea, rather fastnesses and keeps than places of permanent residence;¹ as a general rule they were inaccessible except by means of a boat,² but a few of them were approached by causeways. Until a few

land called Row of Cashill, is known to be founded upon a float of timber, quich, in the summer 1715, was clearly discovered by one Walker, who, with his boat passing this isle, observed one end of a large square oak joist below the island, quich, with another of the same sort, he found means to get up, both being of a prodigious bigness; the manner of joining that large float being thus: There were in the one joist three or four large square mortises, and in the other ane equal number of plancks proportional to the mortises, and joined so firmly together as if all were one solid piece, upon which this isle was built. . . . Upon the *row*, or point of land next adjacent to this isle, is the ruin of an old building called Castle-na-fean, or the Giant's Castle. It is built of a round form, being near sixty paces in circumference. . . . The stones are of a hard blue whin, made mostly quadrangular, and of that prodigious bigness as clearly evinces the strength of the builders, seeing in place of art. all seems to be performed by main force. The inhabitants of this building seem to be those who were so needlessly curious as to build the above-mentioned island."—Mr Robertson's Notes, quoting *Nimmo's History of Stirlingshire*, pp. 593-595, edit. 1817.

¹ The following instructive notice extracted by Mr Robertson from the Register of the Privy Council, associates crannogs with houses of defence and strongholds:—"Instructions to Andro bischop of the Yllis, Andro lord Steuart of Vehiltrie, and James lord of Bewlie, comptroller, conteining suche overturis and articles as they sall propone, to Angus M'Coneill of Dunnyvaig and Hector M'Clayne of Dowart for the obedyence of thame and thair clanis. 14 Aprilis 1608. . . .

That the haill houssis of defence strongholdis and *cranokis* in the Yllis perteing to thame and their foirsaidis sal be delyverit to his Maiestie and sic as his Heynes sall appoint to ressave the same to be vsit at his Maiesty's pleasour. . . .

That they sall forbeir the vse and weiring of all kynd of armour outwith thair houssis especiallie gunis bowis and twa handit swordis, except onlie ane handit swordis and targeis."—*Regist. Secreti Concilii: Acta penes Marchiarum et Insularum Ordinem*, 1608-1623, pp. 4, 5.

² A.D. 1436. The crannog of Loch Laoghaire was taken by the sons of Brian O'Neill. On their arrival, they set about constructing vessels to land on the crannog, in which the sons of Brian Oge then were: on which the latter came to the resolution of giving up the crannog to O'Neill, and made peace with him. (*Annals of the Four Masters*, vol. iv. p. 907.) The solitary island in Loch Earn, called Neish's Island, is said to have been surprised, in the time of James V., by the Macnabs in a similar way. The Neishes felt secure in their island from its inaccessibility, but their enemies

centuries ago, the Irish lakes in which the islands were constructed were embosomed in dense forests. The country was intersected in all directions, especially in Ulster, by bogs and morasses; so that in some cases, as at Kilknock Loch, in Antrim, the edge of the loch could only be reached on a causeway through the surrounding bog.

The early notices of crannogs in the Irish Annals are connected with scenes of strife, when, as is frequently the case, the island of the weaker party is said to have been burned down and destroyed. The term applied to them in the Ulster Inquisitions of 1605 is "insula fortificata;" and in answer to an inquiry made by the Lords of Queen Elizabeth's Council in 1567, as to "what castles or forts O'Neil hath, and of what strength they be," it was answered "that for castles he trusteth no point thereunto for his safety and that fortification that he only dependeth upon is in sartin ffreshwater loghes in his country; . . . it is thought that there in ye said fortified islands lyeth all his plate w^{ch} is much, and money, prisoners and gages; w^{ch} islands hath in wars before been attempted, and now of late again by the Lord Deputy, then Sir Harry Sydney, w^{ch} for want of means for safe conduct upon y^e water it hath not prevailed." (Quoted in Shirley's Account of the Territory or Dominion of Farney, p. 93.)

It is recorded of Brian Borumha, under A.D. 1013, "multa propugnacula et insulas firmis munimentis vallavit."—*Annals of the Four Masters* (*O'Donovan's Edit.*), vol. ii. p. 770, note.

It is plain, however, from the extensive remains which have been found around *some* of the crannogs, that they had been places of residence, and scenes of busy industry for long periods, and at various times.

The great masses of bones around and upon the large island at Dowalton, would alone have suggested that they were the remains of long occupation, or of occasional occupation frequently repeated. They are, however, not to be compared with the deposits about some of the Irish Islands, from two of which (in Loughrea) three hundred tons of bones have been collected.

There can be little doubt that in such cases, if not in all, wooden huts

carried a boat from Loch Tay over the hills, and were thus enabled to reach the island.

* had been erected on the surface of the islands, although none of these have been preserved in their complete state.

The county of Monaghan, formerly Mac Mahon's country, contained many crannogs in the small lakes which occur in every district. They are particularly noticed in the early maps of the county (in the State Paper Office) as "The Iland," with the addition generally of the name of the chief who resided in each. At Monaghan, we have "The Iland—Mac Mahon's house," represented as a mere hut, occupying the whole site of a small island in one of the lakes adjoining the present town.

The residence of Ever Mac Cooley Mac Mahon, chief of the celebrated district of Farney, in Mac Mahon's country, in the reigns of Elizabeth and James I., was at Lisanisk (close to the town of Carrickmacross), and is marked in Jobson's map, made in 1591, as "The Iland—Ever Mac Cooley's house." The foundations of this ancient residence were discovered in the autumn of 1843. Seven feet below the present surface of the earth, in the little island at Lisanisk, and two feet below the present water level of the lake, a double row of piles was found sunk in the mud; the piles were formed of young trees, from 6 to 12 inches in diameter, with the bark on. The area thus enclosed, from which we may judge of the size of the house, was 60 feet in length, by 42 in breadth.¹

Some crannogs in the south of the county of Londonderry were besieged in the Irish wars in the time of Charles I. One at Loughinsholin was garrisoned by Shane O'Hagan.² On his refusal to surrender, the enemy contrived to flood the island. "The garrison kept watch in *the island house*, and one of their men was killed by a cannon ball while on watch. However, they refused to surrender the island on any terms. One man in attempting to swim away had his leg broken. The enemy at length departed."

It seems plain that, in this case, the elevation of the hut on the island, saved the garrison from the effect of the flooding.

Two years afterwards, viz., in 1645, we read that the people of O'Hagan burned the Inis O'Lynn for want of provisions, and followed the general eastward.

¹ Mr Shirley in Arch. Journal, vol. iii. pp. 45, 46.

² Friar O'Mellan's Irish Journal of the Rebellion of 1642, quoted by Dr Reeves. Proceedings of Royal Irish Academy, vol. vii. pp. 157-8.

It is not improbable that the cabins in Mac Mahon's islands, and "the island house" just referred to, were of the same construction as a curious wooden house discovered in 1833 in Drunkelin Bog, county of Donegal, under a depth of 26 feet of bog. On an examination by Captain Mudge of the Royal Navy, who has given a description of this house, with drawings, in "*Archæologia*" (vol. xxvi. p. 361), it appeared to be only one portion of a collection of houses covered by the bog. It consisted of a square structure, 12 feet wide and 9 feet high, with a flat roof. The framework was composed of upright posts and horizontal sleepers, mortised at the angles. These frames contained planks laid edgewise one upon another, the lower one being fixed in a groove cut in the thick sleeper at the bottom. The marks of cutting in the mortises and grooves corresponded with the size and shape of a stone chisel found on the floor of the house.

The structure was surrounded by a staked enclosure, portions of the gates of which were discovered. A paved causeway, resting upon a foundation of hazel bushes and birchwood, led for some distance from the house to a hearthstone, on which a quantity of ashes and charred wood remained, and near to it several large logs of wood half burned, and also pieces of bog-turf partly burnt. Dr Reeves gives a notice of a crannog in Kilknock Lough, county of Antrim, on which a wooden hut was placed, constructed of oak beams. These, however, were removed, and used as part of the roof of a neighbouring barn, before any correct description of the structure was recorded.¹

One of the timbers from Toneymore has a mortise cut in its centre, 8 inches by 5, and has been supposed by Dr Wilde to have formed a portion of one of the crannog-houses on the island.²

On one of the four crannogs in Lough Rea, county of Galway, an upright beam was mortised into a horizontal one. From the upright beam stakes ran away as if to form a partition.³ Mr Mulvany has also reported, that in many cases, pieces of oak framing have been found with mortises and cheeks cut in them. Some of these appear to have been portions of an ordinary door frame, but others are portions of a heavy frame, the use of which does not appear so evident.⁴

¹ Proceedings R. I. A. vol. vii. p. 154.

² Ibid. vol. viii. p. 419.

³ Ibid. vol. viii. p. 290.

⁴ Ibid. vol. v. p. xlv.

Some of the the numerous mortised beams and frames of oak rafters on the island at Dowalton correspond to the descriptions of those which formed the wooden house in Drunkelin Bog; and I think it most probable that they, as well as the morticed and grooved beams described by Mr Mulvany, formed the framework of the huts which had originally been placed on the islands. At Dowalton these frames were numerous and of varying size, some of them of a length which suggested to Lord Percy their resemblance to a modern Galloway gate; and in some of them, as I have stated, there appeared traces of wattling. Such objects could hardly have been required in the construction of the body of the islands, although the position of some of them on the margin led Lord Percy to the conclusion that they had been there used as breakwaters. In Irish crannogs, wooden logs have frequently been found resting on the layers of which the under part of the islands were formed, and the mortised hurdles at Dowalton were found lying as if they *might* have been used for such a purpose. But it seems unlikely that objects requiring such an expenditure of skill and labour would have been there used for a purpose, which was elsewhere accomplished by undressed logs as a floor for any necessary superstructure.

If any of the mortised beams at Dowalton can be regarded as portions of wooden huts, their confused condition may have been the result of their violent overthrow by an agent which threw them to the south-east side. Such overthrow was occasionally the result of a tempest of wind, as we find it recorded of an Irish crannog in A.D. 990, "the wind sunk the island of Loch Cimbe suddenly, with its dreach and rampart, *i.e.*, thirty feet."

Dr Gregor of Nairn, a fellow of this Society, has recently brought under our notice a curious wooden house, of which the walls were formed of oak beams, with a steep-pitched roof of oak rafters, in the Loch of the Clans, on the estate of Kilravock, in Nairnshire. Its foundation was surrounded by piles, and covered by a cairn of stones.

Our late colleague, Mr John Mackinlay, in describing a crannog in the Dhu Loch in Bute, remarks, that at the south-east corner of the island is an extension of it, formed by small piles and a framework of

¹ Annals of the Four Masters, vol. ii. p. 727. At Dowalton the prevailing winds are from the west, and the trees which have been blown down have fallen to the eastward. Most of the mortised frames were found on the south-east side.

timbers, laid across each other in the manner of a raft. It appeared to Mr Mackinlay to have formed the foundation of some wooden erection, which was destroyed by fire, as the tops of the piles were charred.

The absence of any farther definite traces of island huts cannot be used as an argument for proving that they were not originally constructed, as the natural decay of timber not under the protection of the water or mud, would be sufficient to account for their disappearance.

At the period when the islands were constructed, the surrounding piles would have projected some way above the surface of the water, thus forming a palisade which seems in some cases to have been strengthened by horizontal beams laid on it, and was probably closed by interlacing branches or wicker work, as in one of the crannogs in Lough Rea.

The use of wooden piles for defence was common among the Britons when they came under the notice of Cæsar. The *oppidum* of Cassiavel-launus is described by the Roman General as being "*Sylvis paludibusque munitum*," and by Orosius "*inter duas paludes situm, obtentu insuper sylvarum munitum*." Cæsar adds, "*oppidum autem Britanni vocant, quum sylvas impeditas vallo atque fossa munierunt, quo, incursionis hostium vitandæ causa, convenire consuerunt*."¹

When Cæsar arrived at the Thames, "*ripa autem acutis sudibus præfixis munita; ejusdemque generis sub aqua defixæ sudes flumine tegebantur*."² According to Venerable Bede, some of these stakes remained till his day, when they were about the thickness of a man's thigh, and being cased with lead, remained fixed immoveably in the bottom of the river.³

It seems probable that our own Kenneth Mac Malcolm, nearly a thousand years afterwards, took the same means of strengthening the fords of the Forth, as we are told in the Chronicle of the Scots, "*vallavit ripas vadorum Forthin*."⁴

Perhaps we may recognise a palisaded crannog in the description by Boece of a Scottish "*munitio*," in the time of the Roman conflicts in this country. In Boece's own words it is called "*tumulus quidam in*

¹ Monumenta Hist. Brit. pp. xxxiii, lxxix.

² Ibid. p. xxxii.

³ Hist. Ecc. lib. i. cap. 2.

⁴ Innes' Essay, vol. ii. p. 788.

paludoso loco, equitibus invio, situs. Cui, crebris succisis arboribus, omnes introitus, uno duntaxat excepto, præcluserant." Bellenden's conception of the passage is thus expressed, "the Romanis went forward to assailye this munitioun of Scottis with thair horsmen; bot it wes sa circuitit on ilk side within ane mos, that na horsmen nicht invaid thaim; and it had na out passage bot at ane part quhilk was maid be thaim with flaikis, scherettis, and treis."¹

Palisades are found in the most ancient forts in Ireland, but there they are formed of sharp stones. Thus the cyclopean walls of Dun Ængus, and other forts in the south isles of Arran, county of Galway, are surrounded by a *chevaux de frise* of sharp pillars.

The monastic establishments of an early period consisted, like that at Iona described by Adamnan, of a church, with a number of detached huts for the monks, all within an enclosure, and we are told that the walls of these structures were of hurdle work. The early Irish and Saxon monasteries were on the same plan. Many of the former were erected within the raths which were conceded by chiefs to the Church, and St Monenna's establishments in Scotland were placed on the tops of fortified hills. Wilfrid's monastery at Oundle was surrounded "magna sæpi spinea;" several of the royal residences of Charlemagne are described as "circumdatæ cum sepe," and the enclosure as "curtem tunimo circumdatam desuperque spinis munitam cum porta lignea."²

The idea of pallisaded fortifications is unquestionably a primitive one, although its use, with some modifications, was thus long continued.

Some of the Irish crannogs are placed, not on artificial islands, but on natural shallows of clay or marl, connected with the shore by piled causeways, and some of the Scotch structures are of the same character. Thus the island on which the fort in Loch Quein, Isle of Bute, is placed, is described as being of natural formation, and fenced with a wall of stones instead of palisades. Two rows of piles extend from it to the shore, on which a causeway had rested.

In the Carlinwark Loch near Kirkcudbright, are both artificial and natural islands. One of the latter, called the Fir Isle, was surrounded

¹ Book iv. cap. 3, vol. i. p. 117.

² Pertz. Monumenta German. vol. i. p. 179.

by a stone rampart, and was reached from the shore by a causeway of stones, secured by strong piles of oak.¹

Many of the strengths in the Hebrides, in Sutherland, Caithness, and the Orkney Islands, are placed on natural shallows, surrounded by water and approached by causeways; but there, no piling appears.

In many of the larger lochs of Ireland, the crannogs are found in groups of two, three, and four. We have parallel groups of crannogs in Dowalton. There were four fortified islands in Carlinwark Loch, of which two were artificial. There were two in the Loch of the Clans. There were at least two fortified islands in Loch Canmor, of which one was artificial; and the same arrangement occurred in the Loch of Forfar.

Single crannogs have been found in the Loch of Banchory, in the Dhu Loch, and Loch Quein. In the course of 1864 a crannog was discovered in the Black Loch of Sanquhar. This is now a very small sheet of water, being about 100 yards in length, by 60 in breadth. The island in the centre is a circular structure of piles and stones, measuring from 10 to 15 yards in diameter. A causeway led from the island to the side of the loch, and a canoe, of about 15 feet in length, was found in the loch.

The objects found on the Irish islands comprehend specimens of almost everything found on those at Dowalton, and show the same combination of articles of personal ornament with such homely objects as querns and the like. Querns and hones are of almost universal occurrence.

Several pieces of iron slag were found on one of the crannogs in Tonnymore Loch. In the same crannog were found a variegated enamel bead,

¹ While these sheets are passing through the press, an interesting discovery, made in the Loch of Carlinwark, by Mr Samuel Gordon, of Castle Douglas, and a friend, has been communicated to me by Mr Gordon. While fishing in the loch in a boat, at a spot near to the Fir Isle, on the 21st of June 1866, they discovered in the mud a large bronze cauldron, of about $2\frac{1}{2}$ feet in diameter at the top, formed of separate pieces riveted together, and patched in many places in the same manner. It was found to contain numbers of spear and dagger points, axes, hammer-heads, horses' bits, portions of chain armour (of very small links), and a lot of armourers' tools, all of iron, with some small objects and fragments of bronze.

a large irregularly-shaped amber bead,¹ a smaller one of enamel paste, and a small blue glass bead; several small earthen crucibles, supposed to be for gold smelting. Amber and blue glass beads were found in the crannog on Lough-na-Clack, county Monaghan.² At Ardakillan a brass bowl, hammered out of the solid, was found, and two brass vessels most curiously rivetted together. A portion of a leather sandal was found in the wooden house in Drunkelin Bog before referred to. Brooches, bracelets, and pins of bronze, were found at Ardakillan, as also buckles, some of which contained pieces of enamel and Mosaic work. A brazen pot and three brass bowls were found at Dunshaughlin; but although large bronze caldrons are frequently found in Irish bogs, I observe hardly any mention of the bronze dishes, pots, or "coffee-pot" vessels among the relics of crannogs, which are so frequently found in those of Scotland. An iron axe was found at Dunshaughlin.

These are analogous to most of the objects at Dowalton, except the armlets of enamelled glass found there; but besides these, there have been found in some of the Irish crannogs iron chains, metallic mirrors, circular discs of turned bone, whorls, shears, bone combs, wooden combs (of yew), toothpicks, and other articles of the toilet, pieces of stag's horn sawn across, spearheads of iron, a bronze pin of the same form as those found at Norrieslaw, &c.³

The circular discs of turned bone above referred to are the table-men for chess, which, with similar games, was a favourite pursuit of the early Celtic people.⁴ On the discovery of the crannog in the Loch of Forfar by drainage, in 1781, about thirty or forty of these table-men, made of round pieces of horn, were found. One of these, perforated and ornamented, is in our Museum⁵ (Plate XIII. fig. 5). In the same place, several silver objects, shaped like ear-rings, were found. There were found at Banchory

¹ een enamelled glass beads from Dunshaughlin are in the Irish Museum.

² Arch. Jour. vol. iii. p. 48.

³ Arch. Jour. vol. vi. p. 102.

⁴ Among the objects found on the crannog in Cloonfinlough were horn discs like backgammon men (Proc. R. I. A. vol. v. p. 209); and in a moss in the parish of Parton, in Galloway, at a depth of twelve feet from the surface, was found a set of seven "reel-pins" and a ball, all made of oak, which are now in the Museum of the Antiquaries. The pins were found standing just as the players had left them.

⁵ Among the subsidies due by the Monarch of Ireland to the Chief of Farney were six chess-boards.—*Book of Lecan, in Shirley's Dominion of Farney*, p. 11.

bronze vessels shaped like coffee-pots, and others like modern kitchen pots (Plate XIII. figs. 2, 3, 4, 5). A similar bronze coffee-pot was found at Loch Kanmor (Plate XIII. fig. 6).

It must be remarked, however, that all the Dowalton relics yet discovered must be referred to the occupation of an early period; while the remains on many of the Irish crannogs afford evidence of a continued and late occupation. Thus, while on the island at Cloonfinlough there were found various relics of bronze, horn combs of great artistic merit, with a canoe, there were discovered besides, a coin of the Emperor Hadrian, coins of the English Edwards', and a coin of James II. The indications of occupation drawn from the occurrence of coins in any given locality are always liable to doubt, but are entitled to weight when they are found in connection with such objects as Mr Shirley discovered at Loch-na-Glack, viz., iron coulter of ploughs, a long gun-barrel of the sort called a calliver, part of the lock of a pistol, an earthen pot of Dutch manufacture, with the figure of a man's head below the spout, used in Ireland during the seventeenth century, and called grey-beards, with some small Dutch tobacco-pipes.¹

Many notices in the Irish annals, some of which I have already quoted, concur, with these vestiges, to show that crannogs were occupied as fortified retreats in the wars of the seventeenth century.²

It has been taken for granted by some that the crannog in Loch Canmor, in Aberdeenshire, was used for a like purpose about the same time. It appears, however, that besides the crannog, or artificial island, there were other three natural islands in the loch. The largest is about an acre in extent, and on it the traditional castle of Malcolm Canmore was placed. When I first visited the spot, many years ago, I saw great rafters of black oak, with the rude mortisings which joined them, lying on the margin of the loch opposite to this island, which seem to have formed part of a pier. Wyntown, when describing the battle of Kilblene, which was fought on the neighbouring moor of that name, says—

¹ Arch. Jour. vol. iii. p. 48.

² A.D. 1603—Hugh Boy O'Donnell, having been wounded, was sent to Crannog-na-n-Duini, in Ross Guill, in the Tuathas, to be healed.—*Annals of the Four Masters in Ulster Journal of Archaeology*, vol. ii. p. 142.

"Schyr Robert Meyhneis til Canmore,
Went, quhare he wonnand wes before ;
Thidder he went, and in a pele
He sawfyt hym and his menyhe welle."

Fordun, in describing the skirmish, says that Menzies was received "in turre sua de Canmore."¹ This "pele" occurs in the investitures of the Huntly estates in the sixteenth century as the "mansion of Loch Cawnmoir," and was obviously a place of occasional residence of the Earls of Huntly, being probably used as one of those Highland fastnesses which most of the Scottish nobles of early times found it useful to possess in the emergencies which were then frequent, such as the demolition of their more accessible castles in the low countries. In 1497 Lachlan M'Intosh of Galowye granted his bond of manrent to the Earl of Huntly "at Lochtcannor."² In 1519 one of the earl's vassals appeared at "lie Peir de Lochtcannor" (being the construction of which I saw the ruined materials), to have presence of the earl, and ask from him his lands of Kincairgy.³ According to Sir Robert Gordon, the army of the Scottish Parliament took the Isle of Lochcannor, which the Marquis of Huntly had fortified,⁴ and in June 1648 the Estates of Parliament ordained the fortifications of Loch Kender to be "sighted."⁵

"On one of the frequent pilgrimages which James IV. made to the shrine of St Duthac at Tain, this tower received the wandering monarch within its walls, and the treasurer's accounts preserve the expense of 'trussing the king's dogs in the boat when he went to Canmore, and of a payment to the boatmen for carrying them across.'"⁶

All these statements, however, refer to the large island on which the pele was erected, and not to the artificial island in another part of the loch.

It has, in the same way, been assumed that a castle, also ascribed to Malcolm Canmore, was erected on the stockaded island in the Loch of Forfar. But here also there were other two natural islands, besides the one of artificial construction, and the castle in question stood on

¹ Vol. ii. p. 321.

² Miscellany of the Spalding Club, vol. iv. p. 190.

³ Antiq. of Shires of Aberdeen and Banff, vol. iv. p. 344.

⁴ Hist. of Family of Sutherland, p. 537.

⁵ Acts of Parl. vol. vi. p. 326.

⁶ Proceedings of the Society of Antiquaries of Scotland, vol. i. p. 259.

one of the former. This was on the north side of what is now the town of Forfar. Queen Margaret's Inch, as the stockaded island was called, was nearly equidistant from both ends, and the third was called the West Inch. In the end of last century there remained a considerable part of a building of some sort on the Queen's Inch, and a structure which is described as "an oven," almost entire; but it was not the site of the castle of Malcolm Canmore, which is said by Boece to have been "castellum valde munitum uti ejus docent ruinæ, undique pene septum immenso lacu, ubi post deletos Pictos, Scotorum reges, loci capti amœnitate, sese frequentius continebant (fol. 67).¹

Queen Margaret's Inch is described in 1781 as almost of a circular figure, full of trees, and used as a garden, surrounded with water of many fathoms.² It became accessible from the north side after the partial drainage which then took place.

For the following historical notices of this "Inch" I am indebted to Mr Robertson's Notes:—

"By a charter dated at Kinross 18 July A.D. 1234 King Alex. II. granted to the monks of Cupar decem mercas annuatim ad sustentationem duorum monachorum de domo de Cupro qui perpetuo ministrabunt et divina celebrabunt in insula nostra infra lacum nostrum de Forfar Concessimus item dictis monachis manentibus in dicta insula ad sustentationem eorundem communem pasturam in terra nostra de Tyrbeg ad sex vaccas et unum equum. Concessimus itaque dictis monachis ut de terra de Tyrbeg rationabiliter habeant focale ad usus suos proprios et ad usus eorundem qui extra insulam predicta animalia sua conservabunt."³

"On the 24th of July 1508, the abbot and convent of Cupar in Angus, granted for life to Sir Alexander Turnbull, chaplain, their chaplaincy of St Margaret's Inch, in the Loch of Forfar (capellaniam nostre capelle Insule Sancte Margarete Scotorum Regine iuxta Forfar), taking him bound to personal residence; to see to the building and repair of the chapel, and houses, (quod diligens sit et assiduus circa structuram et reparacionem capelle et edificiorum eiusdem); to suffer no secular lords

¹ Monippennie, in his Description of Scotland in 1612, says, "the toune of Forfar, with an old castle, with a loch and an isle therein with a tour."—*Mr Robertson's Notes*.

² Letter from the Rev. John Ogilvy, Forfar, 26th June 1781.

³ Regist. Monast. de Cupro in Angus, MS. at Panmure.

or ladies, or strangers of any sort or sex, to make their abode in the island without leave of the abbot and convent asked and given (*nec dominos vel dominas temporales, aut alienos cuiuscunque generis vel sexus recipiat, ibidem permansuros, sine nostra licentia petita et optenta*); to make plantation of trees within and without, and to make works of stones for the defence and safety of the loch and its trees, lest the trees be overthrown by the force and violence of the water (*eciam dictus capellanus faciat plantaciones arborum extra et infra ac construet congeries lapidum pro defensione et tuitione laci et arborum eiusdem, ne arbores cum impetu et violencia aque destruentur.*)”¹

I have remarked that no weapon of stone or bronze has been found at Dowalton, and Dr Wilde tells us that “they do not find any flint arrows or stone celts, and but very few bronze weapons, in the Irish crannogs.”² The remains, however, described by Mr Shirley from the crannogs in MacMahon’s country include stone celts of the common type, a rough piece of flint, apparently intended for an arrow-head, three bronze celts with loops on the sides, a dagger and chisel of bronze, two bronze arrow-heads, double-pointed, the boss of a shield of bronze, bronze knives,³ &c.

Dr Wilde is inclined to suggest as the probable date of the Irish crannogs a period “from the ninth to the sixteenth century.”⁴

This may be called the period of their *historical* existence, but if we are to judge from the character of some of the remains found on them, and other circumstances, their origin must be assigned to a period much earlier.

That they continued to be erected, and even by the English conquerors of Ireland, in times comparatively recent, we may learn from a notice in the Irish Annals under the year 1223, to the effect that “William de Lacy came to Ireland, and made the crannog of Inis Laegachain; but the Connacians came upon the island by force, and let out the people who were on it on parole.”⁵ This is one instance of what the Statute of Kilkenny complains of, that many of the English,

¹ Regist. Assed. Monast. de Cupro. MS.

² Proceedings R. I. A. vol. vii. p. 152.

³ Arch. Journal, vol. iii. p. 47.

⁴ Arch. Journal, vol. vii. p. 149.

⁵ Annals of the Four Masters, vol. iii. p. 208, *note*, quoting Annals of Kilronan and Clonmacnoise.

forsaking the English language, manners, modes of living, laws and usages, live and govern themselves according to the fashion, manners, and language of the Irish enemy.

Mr Robertson quotes the following passage from Fordun, which shows the use of an "isle" in Murrayland in A.D. 1211, as a fastness and store for goods and treasure:—

"Dominus Rex electorum quatuor millia hominum de exercitu misit, ut ipsum Gothredum [Macwillam] quaerere, ubi eum latere putabant. Quibus in campi-doctores praefecit quatuor militares, comites videlicet Atholiae et de Buchan, Malcolmun Morigrond, et Thomam de Londy ostiarium suum: qui pervenientes in quandam insulam, in qua ipse Gothredus victualia congregaverat, et thesauros suos inde asportaverat, cum Gothredicis congressi sunt; ubi utrinque ceciderunt interfecti multi; plures tamen ex parte rebellium: quorum qui remanserunt, ad proximum nemus et loca tutiora pro tempore declinârunt. Dominus autem rex, circa festum S. Michaelis, rediens inde cum manu valida, Malcolmun comitem de Fyfe Moraviae custodem dereliquit."¹

"Qui Gothredus anno praecedenti. . . . venit ex *Hibernia*."²

Fordun, about the same time [1228], records that a Scot, called Gillescop, set fire to sundry "munitiones ligneas" in Moray, and killed Thomas of Thirlestane, a robber, by an unexpected night attack on his "munition."³ And if these notices can be held to refer to crannogs, they are probably the last historical reference to their occupation; although, no doubt, islands in lakes may have afforded occasional retreats in troubled districts to such robbers as Thomas of Thirlestane in much more recent times. But such casual occupation has nothing in common with the systematic use of palisaded islands in early times. The use of one lake island, among the wilds of Strathspey, as a retreat amid the disorders of the seventeenth century, is preserved in an account of that country, written about 1680, in which Loch-an-Eilan is described as "useful to the country in time of troubles or wars, for the people put in their goods and children here; and it is easily defended, being environed with steep hills and craigs on each side, except towards the east."

Among other points of coincidence between the Scotch and Irish

¹ J. de Fordun *Scotichronicon*, lib. viii. c. lxxvi.

² *Ibid.*

³ Lib. ix. c. xlvii.

crannogs, I may notice a tradition connected with some of them, common to both countries, which seems to have arisen from the submersion of the island houses by the rising of the waters in the lochs. In Lough Rea, county of Galway, four crannogs have already been brought to light, and heaps of regularly placed stones have been observed under water in the shallow parts of the lake, which may prove to be structures of the same kind. There is a tradition in the country about Lough Rea, that "a city lies buried under the lake."

In Carlinwark Loch, near Kirkcudbright, are two natural islands—one near the north, and the other near the south end. Around the latter was a rampart of stones, and a causeway secured by piles of oak led from the island on the north-east to the side of the loch. Close to the side of the island there was a break in the causeway, in which large beams of wood remain, and are supposed to have formed part of a drawbridge. On this island the remains of an iron forge are to be seen. The recent discovery of armour and armourers' tools near this island have been previously described.

Canoes were found in various parts of the loch, as also several very large heads of stags, a capacious brass pan, and a bronze sword.

The loch was drained for marl in the year 1765, when the two artificial islands, which had previously been under seven feet of water, emerged. A tradition has always prevailed in the parish that there was a town sunk, or "drowned," in the loch.¹

The analogies between the Scottish crannogs and the Swiss pfahlbauten, or pile building, are not many. They had one common idea in their construction, in that their builders sought for security in the midst of waters. But the Swiss structures seem chiefly to have been collections of *villages* situated on platforms resting on piles along the shores of the lakes. These platforms were reached from the shore by gangways formed on piles, and on the platforms were placed the huts of the people.

In the year 1860, twenty-six such village sites had been traced in the Lake of Neufchatel, twenty-four in that of Geneva, and sixteen in that of Constance. The number of relics of various kinds found on the site

¹ New Stat. Account of Kelton, Kirkcudbrightshire, p. 154.

of these ancient villages is immense. Twenty-four thousand were raised from one locality, that of Concise, in the Lake of Neufchatel. The objects differ greatly in character in different villages. In some are varieties of stone implements, many of them fixed in deer-horn hafts, objects of bone and horn, a few objects of bronze, an occasional amber bead, rude pottery; and great quantities of teeth of the bear, boar's tusks, bones of the deer and wild boar, of sheep and oxen, and more rarely of a small species of horse, are found.

At the Nidau Steinberg, in the Lake of Bienne, an extensive collection of bronze relics was found, consisting of swords, spear-heads, sickles, celts, rings, and armlets, many of them covered with ornamental designs. In some cases Roman remains have appeared.

The people were not unacquainted with agriculture, if we may judge from the occurrence of grains of wheat and barley; and they had mats of hemp or flax. All the facts connected with the pfahlbauten seem to speak of their quiet, long continued occupation by a race of hunters, farmers, and fishermen, living in considerable communities. It must be noticed, that we cannot now speak of them merely as Swiss erections, as they have been found in Savoy, in the lakes of upper Italy, in Hanover, and Brandenburg, and, as some have said, in Denmark.

The idea of the Scottish and Irish crannogs is more that of occasional retreat, as the *strengths* of a people driven by an enemy from their ordinary abodes. It would seem, no doubt, from the numerous and various remains found on some of the Irish crannogs, that this necessity of retreat was in many parts of the country an abiding one; and we learn from Dr Reeves, that four crannogs in the county of Antrim were each the accompaniment or head-quarters of a little territorial chieftaincy. "They were," he says, "the little primitive capitals of the four Irish tuoghs or districts, which, being combined in pairs about the beginning of the seventeenth century, went to form two English half baronies, exactly preserving their main boundaries."¹ No evidence of late occupation of this kind appears in regard of any of our known Scottish examples, nor can we trace their influence in the arrangements of property and population, in the way just referred to as occurring in Ireland.

¹ Proceedings Royal Irish Acad. vol. vii. p. 156.

But, although in most cases the pfahlbauten were erected on platforms supported by piles, yet exceptional examples have been found in the Swiss lakes, of structures which have a good deal more in common with the crannogs of this country. At Nidau, in the lake of Bienné, where the great collection of bronze relics was found, an artificial island has appeared, encircled by piles, with horizontal planks at the bottom, to retain the stones of which it is composed in their place. Similar attempts at stone islands appear at Corcelette, and at Concise, in the Lake of Neufchatel, and still more perfect attempts at crannog constructions have been found at Inkwyll Lake, near Soleure, at Nussbaumen, in the canton of Thurgau, and Wauwyl, near Lucerne. To the construction of this last class the term of packwerk, or fascinen-bau, has been applied by the Swiss antiquaries.

Still, in the main, the use of piles in Switzerland was for the purpose of sustaining large platforms, on which whole villages were erected; while, in Scotland and Ireland, the piles were used for protecting the single solid island within them, and forming a palisade for defence round the margin of the island.

To other points of agreement between the Scottish and Irish systems of fortified islands, I may add, that canoes hollowed out of single trees are generally found near the crannogs of both countries. Besides the canoes which have been found in connection with crannogs in Scotland, and which were thus originally designed for use on the waters of the surrounding lochs, others have been discovered in positions which show that they had been used for sailing on rivers. This will appear from the following notice of the canoes discovered in Scotland, which I have prepared for the purpose of comparison, and from which it will be seen that they vary very much in size, and somewhat in construction.

Of two found in the Lochar Moss, one was 8 feet 8 inches long, by 2 feet in width and 11 inches in depth; the other was 7 feet long. One found in Loch Doon was 23 feet in length, by 3 feet 9 inches in greatest breadth. Another measured about 12 feet in length, by 2 feet 9 inches in breadth. The lesser one was square at both ends; the larger was square at the stern, with a pointed bow. The stern was a plank fitted into grooves cut in the solid wood, left thicker for receiving them.

The plank was also fastened by two strong pins of wood passing through well-cut square holes on each side.

One found in 1726, at the mouth of the Carron, under a great depth, was 36 feet long, by 4 feet in breadth.

Seventeen canoes have been found in the ancient bed of the Clyde at Glasgow. Of the first, which was discovered in digging the foundation of St Enoch's Church, at a depth under the surface of 25 feet, the length is not noted. It contained a stone celt, which may have been used in its manufacture. Of the others, one, which was formed of several pieces of oak, though without ribs, was 18 feet in length. One, now in our Museum, was found at Springfield, on the south bank of the Clyde, at a depth of 17 feet below the surface. It measures 10 feet 4 inches in length, by 22 inches in breadth at the stern, and 9 inches in depth. Another, found on the same side of the river, was $19\frac{1}{3}$ feet in length, $3\frac{1}{2}$ feet in width at the stern, and 2 feet $9\frac{1}{2}$ inches midway, the depth being 30 inches. Here there was an outrigger fastened into holes in the side by pins; a cross seat at the stern, and another in the centre, resting on supports of solid wood, left in hollowing out the boat. The stern is a board inserted in grooves. Another vessel found here had a hole in the bottom, which was stopped with a plug of cork. Another was 13 feet in length.

In the Loch of Banchory a rude boat was found, about 9 feet long, made without nails, except two, now in the possession of Sir James Horn Burnett. A small canoe was also found.

A canoe, found at Castlemilk, in Lanarkshire, was 10 feet in length, by 2 feet in breadth. One found in the Moss of Knaven, in Aberdeenshire, was 11 feet long, by 4 feet broad. One found in draining the loch at Closeburn, in Dumfriesshire, was 11 feet 9 inches in length, by 29 inches in breadth at the stern, the average depth being 20 inches. The stern is a plank let into grooves on the sides of the vessel.

Of the Irish canoes, one at Derryhollagh, in Antrim, was 20 feet 9 inches long, 4 feet 7 inches broad, and 1 foot 8 inches deep. One at Ardakillin measured 40 feet in length, by 4 feet across the bow.¹ One at Druma-league Lough, county of Leitrim, was 18 feet long, by 22 inches broad,

¹ Ulster Jour. of Archæol. vol. vii. p. 194.

square at stem and stern. One at Cahore, county of Wexford, measured 22 feet in length, $2\frac{1}{2}$ feet across at the middle, and 11 inches in depth. The stern was formed of a separate piece let into a groove. One of this size was strengthened by three projecting bands or fillets left in the solid in hollowing the inside.¹ One of a lesser class was found in the Bog of Ardragh, in Monaghan, and is described by Mr Shirley as being 12 feet long, by 3 feet broad.² It had wooden handles at each end, by which it could be raised and carried from one loch to another. Mr Shirley describes another, found in the Lake of Monalty, as 24 feet in length, 3 feet at its greatest breadth, and 13 inches in height.³

A canoe found in Loch Canmor was $22\frac{1}{2}$ feet long, by 3 feet 2 inches in breadth at the stern.

Canoes are found in the Swiss lakes, but we have not many details of their measurement. In the Bienne Lake a large canoe, hollowed out of the trunk of a tree, 50 feet in length, by 3 in breadth, has been discovered at the bottom. It is filled with stones, with which it was probably freighted, as materials for one of the stone islands found in this lake; but smaller boats of the same construction are more common.⁴

Of the four paddles in the collection of the Royal Irish Academy, the largest measures 2 feet 7 inches in length, and is $5\frac{1}{2}$ inches broad in the blade, the thickness being half an inch. The five paddles (or rudders) found in the Moss of Ravenstone are all of one size, being 3 feet in length, by 10 inches in breadth in the blade, the thickness being half an inch.

It may be noted, that while canoes hollowed out of single trees⁵ seem

¹ Wilde's Catalogue, pp. 203, 204.

² "Dominion of Farney," where a cut of the canoe is given in the Index.

³ Arch. Jour. vol. iii. p. 46.

⁴ Wyllie in Archæologia, vol. xxxviii. p. 180.

⁵ The mode in which canoes are formed out of single trees at the present day is thus described by the late Captain Speke:—"3d March 1858.—All being settled, I set out in a long narrow canoe, hollowed out of the trunk of a single tree. These vessels are mostly built from large timbers, growing in the district of Uguhha, on the western side of the lake. The savages fell them, lop off the branches and ends to the length required, and then, after covering the upper surface with wet mud, as the tree lies upon the ground, they set fire to and smoulder out its interior, until

to have been in universal use in the rivers and lochs by the early inhabitants both of Scotland and Ireland, there was a different kind of boat also in use by them, which is alone described by the classical writers. Pliny¹ says, "Etiam nunc in Britannico oceano vitiles coreo circumsutæ fiunt," and that when the Britons sail to the Isle Mictim [St Michael's Mount?] it is "vitilibus navigiis corio circumsutis;" when Cæsar had to build some vessels after the British fashion, it is said, "carinæ primum ac statumina ex levi materia fiebant, reliquum corpus navium viminibus contextum coriis integebatur."² Solinus also, speaking of the rough sea between Britain and Ireland, says that "navigant autem vimineis alveis quos circumdant ambitione tergorum tribulorum."³

It appears also from one of the miracles of Ninian, related by his biographer Ailred, that similar vessels were used on the shores of Galloway.⁴ One of the scholars of the saint, fleeing from his discipline, sought a vessel by which he might sail to Scotland; for, says the writer, there is in use in these parts a vessel formed of wicker like a basket, large enough to hold three passengers. This, being covered by the skin of an ox, is rendered impenetrable to the water.

The currach, or vessel covered with skins, thus described, is mentioned by Adamnan as in use in his day. Another class, to which he applies the term "naves," is believed by Dr Reeves to refer to the canoes made of hollowed trees.⁵ The building of a currach is minutely detailed in a passage in the Life of St Brandan, quoted by Dr Reeves: "Fecerunt naviculam levissimam, costatam, et columnatum, ex vimine, sicut mos in illis partibus, et cooperuerant eam coriis bovinis ac rubricatis in cortice roborina, linieruntque foris omnes juncturas navis."

The canoe which so generally accompanies the crannog may be held to mark a very early period, but the currach is said to be still in use on

nothing but a cave remains, which they finish up by paring out with roughly-constructed hatchets. The seats of these canoes are bars of wood tied transversely to the length.—"Journal of a Cruise on the Tanganyika Lake, Central Africa," *Blackwood's Magazine*, Sept. 1859 [Mr Robertson's Notes].

¹ Hist. Nat. in Monum. Hist. Britan. p. viii.

² De Bell. Civil. i. 54.

³ Mon. Hist. Britann. p. x.

⁴ Vita Niniani, in Pinkerton's Vitæ Antiq. Sanct. cap. x.

⁵ Life of St Columba, p. 170, *note*.

the Severn and in many parts of the coast of Ireland, especially of the counties of Donegal and Clare. Some years ago I saw a currach which continued to be used on one of the upper reaches of the Spey till a time comparatively recent.

From the accounts of the early inhabitants of Britain preserved to us by the Roman writers, we may fairly picture to ourselves a settlement of one of their tribes or clans in the neighbourhood of Dowalton, mostly occupied with the chase, living, when at peace, in the wattled huts within their raths on the high grounds, and when pressed by danger betaking themselves to their fastnesses in the waters.¹

Of British strengths we find various notices in the pages of a writer, whose greatness as a general and politician, has, at this long interval, suggested his Life as a worthy theme for the pen of an Emperor of the French.

Of one of these, Caesar says² that it was a place among the woods, strongly fortified by nature and art, which as it seemed had been prepared beforehand for the purpose of domestic war, as all the entrances were obstructed by numerous felled trees; and he adds, they themselves rarely fight out of the woods. He afterwards speaks of the fortified town of Cassiavellaunus,³ in which a considerable number of men and cattle were collected, and which appears to have been an extensive enclosure like those on the hill tops at Yevering and Ingleborough in England, and the Caterthuns in Scotland, in which vestiges of hut circles are found on the extensive flat platforms on the top, protected by the surrounding walls, which would also have sheltered great numbers of cattle. In some cases, as at Noath in Aberdeenshire, there is, besides the fort on the top, another surrounding wall, some way down the hill. The space between the two walls is of a bright verdure, indicative probably of its early use for penning cattle, while the heather begins outside of this lower rampart.

To the same effect Strabo writes,—“Forests are their cities, for having

¹ They probably had some grain to be ground in the querns which they have left behind them, but the masses of bones about the islands, would seem to indicate that the flesh of animals was their mainstay.

² *De Bello Gallico*, lib. 5, c. 9.

³ *Ibid.* c. 21.

enclosed an ample space with felled trees, here they make themselves huts and lodge their cattle, though not for any long continuance.¹"

It would seem that we have here described a space surrounded by a wall and ditch, and probably stockaded with trees, very much of the character of the pah of New Zealand of the present day; and it is plain that they were capable of being well defended, as the pahi proved on the assault of our own soldiers last year, for on one occasion Cæsar's soldiers of the 7th legion had to make a *testudo*, and throw up a mound against the outworks of one of these strengths, before they could take it.²

In the hilly country of the Silures, the stockaded wall and ditch were superseded by the use of stones. Caractacus fortified himself against Ostorius on a rocky height with a *vallum* or *agger* of stones: "rudes et informes saxorum compages, . . . in modum valli prætruit."³

There are many references in the books of the classical writers to the woods and marshes of the Britons.

Eumenius speaks of the woods and marshes of the Caledonians and other Picts; and Pliny describes the Caledonian forests (*Sylvæ Caledoniæ*), as "Romanorum armis terminus."⁴

Herodian tells us that Severus, on his expedition into Britain, more especially endeavoured to render the marshy places stable by means of causeways, that his soldiers, treading with safety, might easily pass them, and having firm footing, fight to advantage. He adds, that many parts of the country being flooded by the tides, became marshy, and that the natives were accustomed to swim and traverse about in these, and being naked as to the greater part of their bodies, they contemned the mud.⁵

Xiphiline, when describing the Caledonians, speaks of their ability to endure every hardship; and adds, that when plunged in the marshes, they abide there many days with their heads only out of water.⁶

The situation of the islands on Dowalton, which combined the advantages of surrounding wood and swamps, completely answers to the Roman description of a British strength. The loch was in the midst of woods

¹ Geogr. lib. iv. *ap.* Monum. Hist. Brit. p. vii.

² Lib. v. c. 9.

³ Tacitus Ann. lib. xii. c. 33-35.

⁴ Mon. Hist. Brit. pp. lxix. and viii.

⁵ Mon. Hist. Brit. p. lxiv.

⁶ Mon. Hist. Brit. p. lxi.

mostly of birch and alder; it had on each end long stretches of swamp, while on the sides it had rising grounds, which probably were covered with the lofty oaks out of which the canoes were fashioned.

The district is indeed full of lochs, some of them in groups, and it is very probable that the site of the mosses in the neighbourhood of Dowalton may also have contained lochs in early days. If so, they no doubt contained artificial islands also, and this is rendered probable by finding paddles with portions of beams and querns in the Moss of Ravenstone.¹

To the south-west is the White Loch of Mertoun, which, as we know, contains a stockaded island. In Pont's Survey, there is laid down Loch "Remistoun," a little way to the south, which may be intended for "Ravenstone," now in moss. On the west is a group of small lochs, called Loch of Aryoullan, Loch Duif, Loch na Brain. North of them is the Loch of Mochrum, Loch of Shellachglash, Kraga Loch, Loch Dyrrhynen, Loch Chraochy, Loch Dyrsnag, Loch Dyrskelby, Loch Ribben, and Loch Mächrymoir. Further to the north are larger lochs, called Loch Ronald, Kerron Loch, Glassoch Lochs, Loch Mackbary, Loch Uchiltry, Loch Dornel, and Loch Mowan.

It seems probable that similar structures had been placed in these lochs, or such of them as were suitable for the purpose.

The locality may thus have been the head-quarters of a considerable population, whose presence probably determined the site of the neighbouring Roman station at Whithorn, in the same way as the position of the British strengths in Northumberland seems to have fixed the track of the Roman road called the Devil's Causeway, and other Roman works on the opposite side of the valley of the Breamish and the Till.

Islands, constructed of layers of vegetable substances like those in Dowalton and the neighbouring White Loch of Mertoun, have not as yet been found elsewhere in Scotland. It will be interesting to watch, in the light of future discoveries, whether this was a local use, or whether it depended on other circumstances, such as the depth of the loch, and the abundance of vegetable materials in the neighbourhood.

¹ Since this was written, I learn that marks of beaches have been found on the face of the rising grounds above these mosses, at the distance of a mile from Dowalton.

There can be no doubt that both palisaded enclosures, whether in woods or waters, and strengths formed of ramparts of stone, were resorted to by the British tribes at the time of the Roman invasion, and their use in other countries can be traced in much earlier times.

A passage (pointed out to me by Professor Sir James Simpson), in a treatise on "Airs, Waters, and Places," by Hippocrates, who lived upwards of 400 years before our era, seems to describe a structure of the same kind as those in Dowalton Loch. Speaking of the inhabitants of Phasis, a region of the Black Sea, he says, "Their country is fenny, warm, humid, and wooded, and the lives of the inhabitants are spent among the fens; for their dwellings are constructed of wood and reeds, and are erected amidst the waters." He adds, that "they seldom practise walking either in the city or the market, but sail about up and down in canoes, constructed out of single trees, for there are many canals there."¹

Herodotus furnishes a still earlier account of an artificial construction among waters, used by a Thracian tribe who dwelt on Prasias, a small mountain lake of Peonia, now part of modern Roumelia. But their habitations were more in keeping with the dwellings in the Swiss lakes than with the island crannogs of Scotland, inasmuch as their habitations were constructed on platforms raised above the lake on piles, and were connected with the shore by a narrow causeway of similar formation.

There is a peculiar interest in this small colony of Dowalton, from its neighbourhood to the site of Ptolemy's Roman town of Leucophibia, which probably suggested the site of the Saxon settlement of Whithorn, and from the circumstance that at least one object of Roman workmanship—the bronze vessel already described—has been found among the relics of the old inhabitants of the islands.²

It is only matter of conjecture how it came there, whether in the course of commerce, by gift, or by appropriation after the removal of their Roman neighbours. It seems, however, not unreasonable to regard the

¹ "Airs, Waters, and Places," in the genuine works of Hippocrates, by Adams, vol. i. p. 209.

² The remains of a Roman camp are said to be placed about half a-mile to the west of the town of Whithorn, and Roman coins are not unfrequently found in the grounds adjoining the ruined priory.—*New Stat. Acc. Wigtonshire*, p. 55.

occurrence of a Roman vessel at Dowalton, associated as it is with relics which are elsewhere found in early sepulchral cairns and British hut circles, as pointing to a period of occupation of the islands not later, and probably earlier, than that of the Roman settlement at Whithorn.

It seems plain, from the new bottom and the numerous mendings of one of the rude bronze dishes, that such objects were not easily procurable.

The Roman dish was doubtless much regarded, and bears no marks of use. Two vessels of the same description were found, in connection with an encircled earthen barrow, at Gallowflat, in Rutherglen. They were both white on the inside (probably from tinning), and on the broad handles of each was engraved the name of "CONGALLUS," or "CONVAL-LUS." In the mound, a flat stone, perforated with two holes, was found, and beside it three beads, one of which exactly resembles the bead of vitreous paste found at Dowalton.¹ The native appreciation of Roman articles may also be inferred from the occurrence, in an "Eird house," or weem, at Pitcur,² of portions of vessels of embossed Samian ware.

The absence of all relics of a necessarily later period, makes it probable that the occupation of Dowalton was not continued, either from the submersion of the islands, or from some other change of circumstances.

Among events which may have conduced to such a change was the settlement in the neighbouring Roman town, towards the end of the fourth century, of the illustrious Ninian, from whose lips the dwellers amid the woods and marshes of Dowalton would hear of a new and better hope than had yet animated them, by which they may have been led to more settled habits of life. However this may be, it is certain that Ninian erected at Whithorn a church of stone, after the Roman fashion, and that it remained two centuries afterwards, in the time of Bede, who tells us that the place took its name of "ad Candidam Casam" from this stone church. Here also, it would seem, Ninian erected a monastery, after the custom of the time, where he gathered a religious community to assist him in his missionary work, and in the education of the youths, who, as we learn from his biographer Ailred, were committed to his charge by parents of high and low degree. We gather from another part of Ailred's

¹ Ure's Kilbride and Rutherglen, p. 124.

² Proc. Soc. Ant. Scot. vol. v. p. 82.

work, that Ninian had a flock of cattle, which were pastured on ground at some distance from his monastery.

We do not know how long the church and monastery of Ninian lasted, but when Galloway came under the sway of the Saxons of Northumbria, a bishop's see was set up at Whithorn, and Pecthelm was the first who sat in its chair. That this prelate was a man of some note we may learn from a letter addressed to him by Boniface, the great apostle of Germany, in which he asks for Pecthelm's advice on one of the ecclesiastical points which were then agitating the Christian world. The celebrated Alcuin, the friend of Charlemagne, in the beginning of the following century, addressed one of his letters to the brethren at Whithorn.

Amid the many vicissitudes to which the See of Ninian was exposed, and while the material fabric erected by the masons whom he brought from Tours had given way to more than one successor on its site, the sanctity of the founder's name seemed only to gather strength as time went on. Pilgrimages continued to be made to his tomb down to the period of the Reformation by persons of all ranks, from the monarch to the peasant; and in a letter from James V. to Pope Innocent X., he says that the tomb of Ninian was still to be seen at Whithorn, and that it was visited yearly by flocks of devotees from England, Ireland, the Isles, and adjoining countries. For the bodily comfort of these pilgrims, James IV., by a charter to Sir Alexander M'Culloch, which is now in the charter-chest at Monreith, erected Mertoun into a burgh of barony, "*pro asiamento et hospitacione ligeorum nostrorum, extraneorumque, versus Sanctum Ninianum in Candida Casa, aliasque adjacentes partes peregrinationis et alias negociandi causa proficiscentium et revertencium.*"

We can hardly fancy that the community of Dowalton remained uninfluenced by the neighbourhood of Roman civilisation, or that they gathered no settled habits under Roman rule, while their early knowledge of the Christian religion must have conduced to their progress in every way.

The traditions of the Scottish Church associate with Ninian the name of St Medan, who, coming from Ireland to avoid the addresses of a lover, first settled at the Rinns of Galloway, where her chapel in the rocks may yet be seen; and her persecutor having followed her to that place, she is believed, on the same authority, to have sailed across the Bay of

Luce on a stone, and effected another settlement on the sea-shore in a recess of "The Heughs," where the ruins of a church, dedicated under her name, still remain. This was the church of the parish of Kirkmaiden, which was co-extensive with the barony of Monreith, and reached to the Loch of Dowalton.

Much has been done in Ireland by Dr Wilde, Dr Reeves, Mr Mulvany, and others, to illustrate the history of the crannogs of that country. It is not much more than twenty-five years since they first attracted the notice of Dr Wilde, who described the crannog near Dunshaughlin in the Proceedings of the Royal Irish Academy for April 1840. Our knowledge of the Swiss pile buildings dates from 1853-4, when the subsidence of the lakes, through long-continued drought, revealed the piles, and led to many subsequent discoveries of the greatest interest.

It was only in the light of these that the incidental notices of artificial islands in our own Proceedings and elsewhere came to have a meaning; and the paper read to this Society by Mr Robertson, in December 1858, for the first time discussed the question in a systematic way, and claimed for our Scottish forefathers a place among the island builders of Europe.

I cannot doubt that these islands were numerous, and that many of the lochs in which they were situated were, like that at Thornhill, of very small dimensions. The gradual drainage of such sheets of water generally leaves their site as a morass, which after a time is brought under tillage. And where no outlook is kept in such a process, the remains of piles are destroyed, without any suspicion that they formed part of an ancient structure, and consequently without any opportunity of investigation being afforded. The occurrence of canoes in situations where little of the old loch remains to attest its former existence beyond a bog, as at Knaven, in Aberdeenshire, and at Barnkirk, near Newton Stewart; or where, without a canoe, great quantities of bronze vessels and horns of deer have been found,—as in a morass at Balgone, in East Lothian,—all suggest the sites of early piled habitations.

Several canoes have been found in Loch Doon, under circumstances which give reason to hope that crannogs will yet be found there. Some years prior to 1832, two canoes were discovered close to the rock on which Doon Castle stands. Soon afterwards, a great drought caused the fall of

the loch to an unusually low level, when near the same spot, parts of canoes and other large pieces of timber became visible under the water. It was found a difficult task to extricate the canoes from the debris of large stones, sand, and mud with which they were surrounded. The workmen believed that there were many more canoes lying below and across those which they raised, but although their feet rested on these when at work, yet from the great depth of the water by which they were covered, and which reached to their necks, they did not see the objects which they supposed to be canoes. It seems much more probable that these and the large pieces of timber already referred to, are portions of a ruined crannog.

Somewhat to the south of this spot is another small island, which is laid down in Blaeu's Atlas as "Prisoner's Stone," and in the Ordnance survey as "Pickman Isles."

The artificial island in Loch Canmor, in Aberdeenshire, was known as "The Prison" in the end of last century.¹

Before the end of last century several canoes had been discovered in Lochwinnoch, and many have been found since that time.² One person says he saw twenty-one buried in the mud between the isle on which the pele stood, and the north side of the loch. It is much more likely, however, that what he saw was the timbers of a ruined crannog.³

The following facts, for which I am indebted to the Rev. Dr Duns, of the New College, Edinburgh, enable me to preserve the memory of a stockaded island in the loch at Lochcote, in the parish of Torphichen:—

The loch lies at the foot of the southern slope of Bowden Hill, and is now drained. An old man who belonged to Dr Duns' congregation, when he was at Torphichen, more than once described to him the appearance of the loch before it was drained—"its central island, and the big logs taken from it and burned." Horns were also found in the loch, but were neglected, and have disappeared. Dr Duns found part of a quern on an examination of the site; and on digging into a mound at a short distance eastward from the loch, he found an urn of rude type. To the south are the remains of a circular earthwork; to the

¹ Letter from Mr C. Innes of Balnacraig to Mr G. Chalmers, 7th August 1798.

² Old Stat. Account, vol. xv. p. 97.

³ New Stat. Account, Renfrew, p. 97.

south-west, traces of what has been called a Roman camp; and to the south, a camp of peculiar form, noticed by Sibbald.

In the middle of Lochrutton is a small island of circular form. It is said to be formed of stones on the surface, and to be founded on a frame of oak.¹ In Loch Urr is an island approached by a stone causeway, both of which are now submerged, probably by the growth of moss at the spot through which the river finds its way from the loch. Mr Robertson notes that at Lochore, in Fifeshire, great quantities of oak timber were dug up since the loch was drained. They are believed to have formed part of a causeway connecting the Castle Island with the mainland.

In the Castle Loch of Lochmaben, on the south-west side, is a small artificial island, where there are stakes of oak still remaining on either side of it, which have been put in as a fence against the water.²

Of an artificial island in Loch Lochy, Mr Robertson gathered some particulars from "Ane Descriptione of certaine Pairts of the Highlands of Scotland,"—a MS. in the Advocates' Library, written towards the end of the seventeenth century. "Ther was of ancient," says the author, "ane lord in Loquhaber, called my Lord Cumming, being a cruell and tyrrant superior to the inhabitants and ancient tenants of that countrie of Loquhaber. This lord builded ane iland or an house on the south-east head of Loghloghae; . . . and when summer is, certain yeares or dayes, one of the bigge timber jests, the quantitie of an ell thereof will be sein above the water. And sundrie men of the countrie were wont to goe and se that jest of timber which stands there as yett; and they say that a man's finger will cast it too and fro in the water, but fortie men cannot pull it up, because it lyeth in another jest below the water." Here, obviously, we have an allusion to the mortising of one beam into another, after the fashion so common in the Irish crannogs, as well as the Scottish examples at Dowalton, Loch Canmor, and Loch Lomond.

In the midst of a morass, about half a mile north-east from the farm of Nisbet, in the parish of Culter, in Lanarkshire, is a mound, of an oval shape, called the Green Knowe, which measures about 30 yards by 40, and rises about two or three feet above the level of the surrounding

¹ New Stat. Account; Kirkcudbrightshire, p. 287.

² *Archæologia Scotica*, vol. iii. p. 77, note c; also "Lochmaben Five Hundred Years ago," pp. 72, 73. Edin. 1865.

bog. On penetrating into this elevated mass, it was found to consist of stones of all different kinds and sizes, which seem to have been tumbled promiscuously together without the least attempt at arrangement. Driven quite through this superincumbent mass, are a great number of piles, sharpened at the point, about three feet long, made of oak of the hardest kind, retaining the marks of the hatchet, and still wonderfully fresh. A causeway of large stones connected the mound with the firm ground. All around it, is nothing but soft elastic moss, and beneath it too, for on cutting through the bed of stones you immediately meet with moss. Near the spot are the remains of some very large trees.

The mound has long been used as a quarry, and is in the gradual course of demolition.¹ Mr Sim of Culter Mains, who first directed attention to this structure, states that the valley in which the Green Knowe is placed was probably well wooded in early days. In a morass at the base of Tinto Hill, a perfect forest of magnificent oak trees has been recently discovered in the course of drainage operations—some of them of great size. Mr Sim recently found an oak under the ground at Culter Mains, a branch of which was four feet in diameter. The stem was not removed. He also states that the old name of the moss, in which the "Green Knowe" is placed, was the "Cranney Moss," which may probably preserve a recollection of its early name of "Crannog." In this neighbourhood were found two gold ornaments of crescent shape (one of which was presented to the National Museum by Mr Sim); and other relics of early times, such as stone celts, are of frequent occurrence.

It is probable that the sites of crannogs may be traced through similar names in other parts of Scotland. Thus we have Crannach Bog or Crannabog, part of the barony of Carnousie; Cranna and Crannabog, part of the estate of Rothie; Cranbog and Lochlands, part of the barony of Belhelvie,—all in the county of Aberdeen. A meadow in the parish of Kilmarnock is called Cransyke. Cranberry Moss is in the parish of Kilwinning, and Cranberry in the parish of Auchinleck.

That a crannog had originally been placed in the Loch of Duddingston seemed very probable, from the discovery of many bronze weapons,

¹ New Stat. Account, vol. vi. p. 346.

a ring handle of a caldron, masses of melted bronze, along with gigantic deer's horns, which were dredged up from the bed of the loch, about 150 yards from the side next the Queen's Park, in a search for marl in 1778; and the following facts, which have just been brought under my notice, seem to add considerably to the probability:—Dr Thomas Thomson of Leamington, son of the Rev. John Thomson, minister of the parish of Duddingston, in answer to my inquiries, thus writes:—“ I have a distinct recollection of the piles or stakes in Duddingston Loch to which you refer; but I am sorry to say I do not so well recollect their exact or relative position, or how many there were. My impression, however, is, that there was at one time a considerable number, and that almost all of them had disappeared when I left Scotland, upwards of thirty-five years ago. They were all of a dark blackish colour, looking as if they had been charred, about from 6 to 8 inches in diameter, and some of them standing above the surface as much as two feet, while there were others only just above it, and a few quite below the surface, rendering it necessary to be careful when rowing in that part of the loch which they occupied. They were firmly fixed in the bottom of the loch, and were used occasionally when sketching or fishing to fasten the boat to them. They were all, I think, on the south side of the loch, and occupying somewhere about the middle third of its length, or perhaps a little higher up to the west end. For the most part, they were at irregular distances from each other, although in one or two instances there were two close together, and there were several not very far from the reeds.”

The drainage operations, which are so general throughout Scotland, cannot fail to bring to light more of these island structures; and I must express an earnest hope that opportunities will be afforded for their careful investigation, and that lists of them may be furnished to the Society. As yet we are very ignorant of the details and varieties of their construction; and every well-authenticated examination is a valuable contribution to the history of structures, which mark a special point in the progress of the early inhabitants of the country.

It may help to such a result, if the knowledge which we already possess of these ancient remains was more generally diffused, so that the discovery in a new locality, of any of the features found in connection

with such islands elsewhere, may lead to an expectation of their occurrence, and to increased care in the search for them.

It was the appearance of the Roman bronze dish at Dowalton, which first suggested to Sir William Maxwell that other remains of early times might be at hand. This led Lord Percy to visit the loch, where his lordship detected the appearance of piles in various places, and made a partial examination of most of the islands. Sir William subsequently bestowed long and patient care in overseeing the excavations of the islands, and the collection of the relics; and believing that such objects are only of real use in a public museum such as ours, where they can be classified and compared with like remains, he has transferred to us the whole collection, with the intention of adding to it from time to time, as fresh discoveries are made.

If such an example should be generally followed, we may be enabled ere long to give shape and body to a class of our antiquities, of which as yet our knowledge is hazy and uncertain.

For the following account of a structure in a moss in the parish of Applegarth, which in some respects has an analogy with the crannogs, but as a whole is unique, I am indebted to my friend, Dr Arthur Mitchell:—

*Curious Structure in a Peat Moss at Corncockle, in Applegarth, discovered
by Sir William Jardine, Bart.*

"Last summer—that is, in 1863—while ‘casting peats’ at Corncockle, in Applegarth, from a bank of the average height of 12 to 14 feet, the labourers came upon a large number of oak trees, lying parallel and quite close to each other—forming, in short, a platform, with 6 or 7 feet of peat below, and as many above. The size of this platform is as yet undetermined, but, from the portion uncovered, it is from 20 to 30 feet wide, while the ends of the trees can be followed in the face of the bank for at least 150 feet. The platform is covered with twigs of birch, and then over these there is a layer of the common bracken, which at present grows with extraordinary luxuriance in the neighbourhood. This layer of birch twigs and bracken is about 10 inches thick, and appears uniformly to cover the platform, except at one point, where flattish whinstones are laid on as a sort of pavement over the trees—the space so covered being

an irregular circle 6 or 7 feet in diameter. On this spot fragments of burnt wood were very numerous, and beside it were found seven large bowls or cups cut out of oak, and a rude oak mallet, with a branch as a handle. The bowls were 10 to 12 inches in outside diameter.

"The ends of all the logs indicate cutting. I know nothing but iron which could have done it. Cleaner cuts I never saw. Some of the cut *faces* even showed the ragged line which would have been produced by a turned point on the edge of the tool.

"Moreover, two of the logs have mortise-holes cut in them. These were 2 or 3 inches square, and were empty.

"The oak logs are not of great size—the largest having a diameter of 14 inches. All the branches were *cut* off. They are all soft and spongy, and quite rotten. They do not show the antiseptic power of the peat, and are not black. From these facts, I suppose we may infer that they had been *long felled, and partially immersed in water, before they were covered by the peat.*

"From all I saw, I conclude that this erection has been one of these three things:—

"(1.) A corduroy road across a morass.

"There are, however, many things against this theory, as, for instance, the existence of the paved spot (a fire-place in all probability); the breadth of the platform; the mortising in the logs; and the want of any apparent need for crossing the morass in this way, as a slight detour would have formed a road on *terra firma*.

"(2.) A large raft or floating island, on which dwellings were erected—a modification of the Lacustrine habitations.

"This would involve the idea of there having been a lake at one time at the place where the platform is found, and also of this lake's having had a bottom of peat—a thing we know to be true of other lakes in the district. When the water was drawn off, the raft on this supposition would settle down on the peat. So far as the topography goes, it appears probable that at at one time there was a lake here. The moss is situated in a basin about a mile across, with an outlet in the shape of a small stream, presently delivering a considerable quantity of water into the Annan, not far from Speddling's Tower. Dam this rivulet up, and a lake could be again formed where the platform is.

"Against this theory, however, there is this important objection—the logs are not in any way bound together, and do not rest on sleepers.

"(3.) A platform erected *on* the bog, on which to build habitations, with a trench round the platform filled with water—a sort of moat—for defence.

"Against this there is, as in the last case, the want of binding together, and also the absence of *piles* to give firmness to the structure."¹

I have received a communication from Sir William Jardine, in answer to some inquiries suggested by Dr Mitchell's paper. He states that no indication of driven piles have been found. As to the nature of the surface on which the beams were originally placed, he remarks that it may have been less compact than at present, but the beams of wood, with brushwood and fern above, must have been placed on a somewhat solid substructure at first.

From this we may infer that the moss was formed before the beams were laid; and it appears in like manner, that the crannog in the parish of Culter rested on a surface of moss.²

¹ April 9, 1864. From Dr Mitchell's Journal.

² Having, when engaged in the preparation of this paper, communicated to Dr Keller, of Zurich, my impressions of the difference in character between the crannogs of Scotland and Ireland and the pile buildings of Switzerland, I have, since it was written, received an answer from that gentleman, from which I venture to quote some passages; and I need scarcely remark, that the experience of Dr Keller, in investigating the pfahlbauten of Switzerland, added to his well-earned reputation as a sound archæologist and historian, give a special value to his statements.

"I am quite of opinion that the crannogs were different from our pfahlbauten, and that they merely served as places of refuge for single chieftains, their family, and property; whereas our pfahlbauten formed complete villages, inhabited for centuries by groups of families, which pursued their agricultural and other labours on the shore. In their lake dwellings, they fabricated their house utensils (pottery, &c.) and their warlike implements, their wearing apparel, &c. We therefore find *rows* of huts, each furnished with its hearth, weaving-loom, &c. When such villages were burnt, they were invariably reconstructed on the same site, which proves that these places were permanently inhabited. The crannogs appear to be strongholds, castles, belonging to *individuals*.

"As regards the construction of the pfahlbauten, there existed two kinds. In one of them the huts were erected on platforms, supported by perpendicular piles; in the other, the foundation was composed of horizontal layers of branches, inter-

APPENDIX. No. I.

The following description of Loch Canmor, in Aberdeenshire, with its islands, and the relics discovered in it, was prepared by the Rev. James Wattie, Bellastraid, at the suggestion of Mr Robertson, who intended to use it in his paper on crannogs. Mr Wattie has been so good as permit me also to make use of it; and as it furnishes a detailed and picturesque account of an early island settlement, with its "surroundings," I have quoted from it at some length:—

"It is uniformly pronounced by the country people Loch Ceannor.

"It lies at the foot of the hill of Culbleen, in the parish of Tullich. It is 36 miles from Aberdeen, and half-way between Aboyne and Ballater, being 6 miles from each.

"The loch is about 3 miles in circumference. It abounds with pike and eels. It is fed by the burn of the Vat. The level of the lake was reduced a little about 26 years ago, by deepening the outlet. A second deepening, in the autumn of 1858, reduced the bed of the loch from $2\frac{1}{2}$ to 3 feet below its original level.

"Until this last deepening, there were four islands in the loch:—1. A small island near the shore, at the north-west corner, called the Crow Island, covered with birches. 2. One at the east end, also near the shore, covered with birches and firs, called the Bramble Island. Both these islands have now ceased to be islands, having been joined to the

mixed with leaves and gravel, which were held together by upright piles. This system bears some resemblance to the crannogs, the huts standing on *terra firma*, if I may use this expression, and not [on piles] above the surface of the water.

"The pfahlbauten were always isolated, but connected by a bridge with the shore, the distance being sometimes very small, but also frequently [extending] to a thousand feet.

"We never find pfahlbauten on natural islands or promontories.

"Artificial islands are not found, but so-called Stein berge, stone hills, which consist of artificial elevations composed of gravel, which has been transported in boats from the shore to places where huts were to be erected. This was done for the double purpose of creating a solid foundation for the piles, and also in order to shorten the distance from the bottom, to the surface of the water."

mainland by the last drainage of the loch. 3. The Castle Island; and, 4. The Prison Island.

"The Castle Island is about 60 or 70 yards from the north shore. It is of an oval shape, having an area of about a Scotch acre. The foundations of the castle may be traced in the dry, parched colour and stunted growth of the grass where the walls stood. There is a rickle of loose stones around the shore of the island, many of them showing evident traces of the hammer. Some suppose this island to have been artificial, but there is not the slightest appearance of its having been so. It is evidently a natural heap of *detritus*.

"Between it and the shore there was a bridge of open frame-work of black oak. The country people say it was a draw-bridge, but it was too long for that, although without doubt part of it was so. The two piers on which the ends of the bridge rested are still to be seen—one on the island, close to a large ash tree; the other on the mainland, directly opposite. From time to time immense beams of oak have been fished up from this part of the loch, which evidently formed part of the bridge. So late as 16th June 1859, an oak beam was fished up, 23 feet 9 inches long, 16½ inches broad, and 13 inches deep, sloped or *skaired* at the ends for joining to other beams, with holes for wooden pins 14 or 15 inches apart, and some of the pins still remain. On the same day another oak plank was taken up about the same place, 22¼ feet long, 3 inches thick at the thickest side, and 2 inches at the other, and 16 inches broad. In some places it was brought to an edge, and at one place marked as if it had been fastened to a beam. It seems to have been split, and not sawn. At 8 inches from one of the ends is a hole, of an oval shape, 4½ inches by 3¼ inches. At several places it looked as if it had been charred by fire on the edge. A third oak beam is to be seen lying at the bottom of the loch, between the island and the shore, apparently about 30 feet in length, with two short pieces attached to it. A fourth oak plank stands up near the island, at an angle of 45°, and 3 feet above the surface of the water.

"Another oak beam is to be seen at M'Pherson, the turner's, near the west end of the loch, where it was taken up some years ago. It is 24 feet long, 13 inches square, and notched, sloped, or *skaired* at one end, with a view seemingly to its being joined to another beam. At M'Pherson's

also is to be seen a bronze vessel, $10\frac{1}{2}$ inches high, with three legs and a handle, found on the beach of the Castle Island. (See Plate XIII. fig. 6.)

"The present depth of the loch, between the Castle Island and the north shore, is from 5 to 7 feet.

"On the north shore, rather to the east of the Castle Island, are the remains of what has been considered the Castle chapel, 52 feet long, and 18 feet wide within walls. There seem to have been two partitions in it, one near each end.

"On the top of a brae, called the Claggan, not far from the chapel, and opposite to the island, stood a sculptured stone, now removed to the park at Aboyne. Between the site of the stone and the loch, on the slope of the brae, is a low cairn of stones, of a crescent form, with the convex side up the brae, 70 feet long, and 24 feet wide at the broadest part.

"The Prison Island is about the middle of the loch, and about 250 yards from its north shore. It is something of an oval shape. It is 25 yards long, and 21 yards broad. It is evidently artificial, and seems to have been formed by oak piles driven into the loch, the space within the piling being filled up with stones, and crossed with horizontal beams or pieces of wood, to keep all secure. The piles seem to have been driven or ranged in a rectangular form. They are quite distinct and apart from one another. The upright ones are generally round, though some of them have been splitted. The horizontal beams are mostly arms of trees, from 4 to 6 inches thick; but there is one horizontal beam squared evidently with an iron tool, about 8 inches on the side. There are not many horizontal beams now to be seen. I remember having seen more (the ends of trees) a good many years ago. My recollection of them is, that they had been splitted. There seems to have been upright piles on all sides of the island, but least distinct at the east end, and most numerous at the west. At the west end thirty upright piles are visible. On the south side, outside the regular row of piles, is a kind of out-fencing of upright and horizontal beams, seemingly for protection against the force of the water. At the west end there are two rectangular corners, and there may have been the same at the east end, though now overgrown with grass. Outside the piles is what may be called a rough, loose causewaying of stones sloping outwards into the water; while inside is what may be called a heap of stones, arising, no doubt, from the putting into

the water of whatever building had been on it. At the west end the piles stand 18 inches above the present level of the stones, and from 12 to 15 inches apart. They are 4 inches thick at the top, and 6 inches thick where they had been under water. Scarcely any of the upright piles are perpendicular; they slope to the north on the west side of the island, and to the west on the south side. Round the heap of stones now forming this island, a clump of trees has sprung up. There is no appearance of a pier or jetty about the island, nor any mark of communication between it and the shore or any of the other islands. The present depth of the loch near the island is 7 feet; half-way between it and the Castle Island, 10 feet. On the north-west side of the island, Dr Taylor and Mr Wattie fished up, in 1859, a crooked oak spar, 12 feet long, broad at one end like the tail of a fish, and pointed at the other, rather triangular in shape, 4 inches on the broad side, and 2 inches on the other.¹

"About the middle of the loch, the depth of the water to the mud is about 8 feet, but no hard bottom was found with a pole of 10 feet. On the south side of the loch, near the shore, the depth is $4\frac{1}{2}$ feet.

"On the south side of the loch is a peninsula jutting into it, rather larger in extent than the Castle Island. It bears evident marks of having been fortified. It had been separated from the land by a fosse which had communicated at each end with the water of the loch, but which is now dry. Over this fosse had been a drawbridge, the site of which is distinctly visible; and the road to and from it was only taken up by the present tenant of Meikle Kinord. On the side of the peninsula next the land, are very distinct remains of a rampart, 100 paces in length, ending in an apex or angle at the site of the drawbridge.

"There are, on the top, the foundations of two small buildings; but they do not seem of any antiquity. The ground is in the natural state, high on the land side, but sloping away to a level at the side next the

¹ "I have been wondering of late whether the upright piles on the artificial island, being in a rectangular form at the west end, and probably also at the east end, would indicate the building on the island to have been of that form, and of the extent marked by the outline of the piles, which might have been placed in their present position as a sure foundation for the walls"—*Letter from Mr Wattie to Mr Robertson*, 3d Sept. 1859.

water, which is fringed with birches. The other part is bare of wood, and is covered partly with heather and partly with rough grass, with a few scattered bushes here and there of juniper. It has been called Gardybie by the inhabitants from time immemorial. There is no tradition in the country of its use or object. The inhabitants point out what they call the site of a chapel, and the marks of graves, on the brae above the loch, and immediately in front of the farm-house of Meikle Kinord. This may have belonged to the fortification.

“Between the farm-house of Meikle Kinord and the loch, and near the latter, Mr Wattie found a lump of a stone of coarse granite, hollowed in a cylindrical form to the depth of $6\frac{1}{2}$ inches, 20 inches wide inside the rim, 4 to 5 inches thick at the top, but thicker at the bottom. It has a hole at the centre of the bottom, $3\frac{1}{2}$ inches wide at the top, and $1\frac{1}{2}$ inch wide at the bottom. One of the sides has been broken away by a fire lighted in it by boys. The use is unknown. Between Gardybie and the Castle Island, the depth to the mud in one place was 8 feet, and in another $8\frac{1}{2}$ feet; but in neither was the hard bottom reached with a 10 feet pole.

“M'Pherson, the turner, who came to the place twenty-six years ago, remembers a range of oak piles driven into the margin of the loch at the west end, where the ground is swampy, with oak boards fastened upon them, all of which have now disappeared.

“On the 16th June 1859, there was fished up from the bottom of the loch, near the north shore, opposite to the Prison Island, a canoe hollowed out of a single oak tree, $22\frac{1}{2}$ feet long, 3 feet 2 inches wide over the top at the stern, 2 feet 10 inches in the middle, and 2 feet 9 inches at 6 feet from the bow, which ended nearly in a point. The edges are thin and sharp, the depth irregular—in one place 5 inches, the greatest 9 inches. There are no seats nor rollocks or places for oars; but there may have been seats along the sides, secured by pins through holes still in the bottom. There are two rents in the bottom, alongside of each other, about 18 feet long each; to remedy these, five bars across had been mortised into the bottom outside, from 22 to 27 inches long and 3 inches broad, except at the ends, where they were a kind of dovetailed, and 4 inches broad. One of these bars still remains, and is of very neat workmanship, and neatly mortised in. The other bars are lost, but

their places are quite distinct. They had been fastened with pins, for which there are five pairs of holes through the bottom of the canoe, at the opposite side, at a distance of from 18 to 21 inches, the bottom being flattish. There are also five pairs of larger holes through the bottom, and also at the opposite sides, which may have been for fastening seats with pins along the sides of the canoe. There are two bars mortised longitudinally into the bottom of the boat, outside, above the seats before spoken of, $2\frac{1}{4}$ inches broad, one at the stern 5 feet long, and the other beginning 5 feet from the stern, and extending $7\frac{1}{2}$ feet towards the bow. The canoe looks as it had been partly scooped out with fire. The bottom is 2 feet 8 inches wide at the stern, and 28 inches wide at the middle. The stern is 18 inches thick, and somewhat worn down at the top.

"M'Pherson, the turner, says that twenty years ago a boat was taken up from the loch 26 feet long, sharp at both ends, otherwise coble built, 8 feet broad in the bottom, which was flat, made of oak planks overlapping one another, and lined under the overlapping with wool and tar.

"On the north side of the old road from Cromar to Tullich, in the hill of Culbleen, is a round hillock called 'the Earl of Marr's Board,' where the Earl of Mar, unattended, on his way to Kildrummie from Lochaber, where he had lost an army, sat and, for want of better fare, ate meal and water out of the heel of his shoe. Hence the Gaelic saying still current in the Highlands,—'Hunger is the best sauce. Meal and water, out of the heel of my shoe, is the sweetest food I ever tasted,' said the Earl of Mar."

"About $1\frac{1}{2}$ mile from Loch Canmor, in a north-west direction, is the churchyard of Logie, where is a stone called Wallack's Stone, in memory of St Wallack. It is flat on one side, and high in the middle of the other. It is of the blue heathen kind, 5 feet 7 inches high, and averaging 3 feet in breadth. It is quite in the natural state. It stood formerly in the dyke round the burying-ground. It now stands outside the new churchyard wall. Formerly a fair, called St Wallack's Fair, was held in the neighbourhood, on the 30th of January. Hence the rhyme still repeated in the country—

'Wallack Fair in Logie Mar,
The thirtieth day of Januar.'

At this fair a foot race was run; the original prize, given by the proprietor of Logie, being a 'twelve ell tartan plaid, and a pair of tartan hose.' When the Highland dress was proscribed, a one-pound note was substituted. Now fair and race are gone; but a social meeting of the people of the neighbourhood is still held on the night of the thirtieth of January."

APPENDIX. No. II.

I am indebted to Sir Alexander Campbell of Barcaldine for the following memorandum:—

"I wish I could help you about the crannogs, but I can say little on the subject. It is now nine or ten years since I resided in the Highlands, and when I was there, my attention was not directed to the subject.

"I could not have lived there, however, without becoming aware that, in many, if not in most, Highland lochs, artificial cairns of stones exist, generally quite close to the shore in shallow water. If I directed the attention of the inhabitants to them, they did not seem generally to have any idea of them; but once or twice, I was told that some man of mark had been drowned there. In the majority of instances the depth of water precluded the possibility of this. The smallness of size generally, however, makes it improbable that they could have been inhabited. I know, however, of one Scotch example to the contrary. It occurs in Loch Tullach, in the Braes of Glenurchay. It is a large cairn of stones, evidently artificial, in deep water near the centre of the loch—where it is perhaps nearly half a-mile broad—about half or three-quarters of a mile from the south-western end of the loch, and a quarter to half a mile from the forest house of Glenurchay. If I remember aright, the water all round it is many feet deep—15 or 20 feet. It is 20 or 30 feet in diameter at the ordinary height of the water. Some soil was taken to it, and some trees planted on it twenty or thirty years since, and I think a few more trees were added fourteen or fifteen years since. I think that, on the east face, or north-east face, there was a small harbour in which a boat could enter. The stones are small, say

the size of a man's head, more or less—I mean, not great blocks of stone. Many years since, when the water one summer was very low, Peter Robertson, the head forester, informed me that he had seen, on a calm summer day, a few feet below the surface of the water, the ends of logs of wood laid horizontally under the stones. I am not satisfied that I ever saw them myself, but I have no doubt that he did, as he clearly described it to me. The tradition of the country is, that a great robber chief, called *Stalkior rioch*, lived upon this island. I do not believe that it is or ever could have been piled at such a depth of water; and if I am correct as to the depth of water, the quantity of stones must be very great, as the slope is very gradual. It is about 4 or 5 feet high at ordinary water. All this is from recollection, so I am afraid my figures would by no means stand the test of measurement, and may be very far from the fact.

"The Isle of Loch Tay is probably to some extent artificial; certainly the stones on its outside faces are artificially placed, though, of course, this may have been done after the building of the nunnery, to protect the foundations. There is, however, a small islet near the shore in the Bay of Kenmore, on the south-eastern shore of Loch Tay, within 100 yards of the head of the loch, and about 20 or 30 yards from the shore, in water a few feet deep—I am afraid to say how many—but in clear weather you can see the bottom, I think. I never was on it; but it bears the appearance of having been artificial, and is formed of stones. It is quite flat on the top, and does not rise more than a foot or two above the ordinary water-mark, and has a stunted tree or two on it. It is, perhaps, 40 or 50 feet long in the direction of the loch, but not nearly 50 broad. It is called the 'Isle of Spry.' There is also, if I remember rightly, one of the island cairns on the north shore of Loch Tay, within 3 or 4 miles of the western end. I cannot at this moment name the locality of others in other lochs, but I have seen many."

The Rev. Alexander R. Irvine, of Blair-Athole, in communicating to me details of the crannog on Loch Tummel, remarks that an island near the west end of Loch Rannoch is formed of stones, and has a tower erected on it, with a causeway leading from the Strowan or south side of the loch. He adds—"I have observed in other lochs in Perthshire islands and remains of buildings; for example, Loch Freuchie, in Glen-

queach, and Loch Kinnard, in the hill above Grandtully. It is curious enough that there is also a small island, a mere cairn, near the east end of Loch Tummel, and of some of the other lochs mentioned, though, from the small extent of dry surface, it is hard to suppose what could have been the purpose for which they were put up."

APPENDIX. No. III.

Sites where vestiges of piling have been found, or other indications of Crannogs.

Loch Ore, Fifeshire—Oak timbers.

Balgone, East Lothian—Bronze vessels, deer's horns, bones of animals.

Barnkirk, near Newton-Stewart—A canoe.

Knaven or Kinaven, Aberdeenshire—A canoe.

Closeburn, Dumfriesshire—A canoe; bronze tripod.

Lochwinnoch, Renfrewshire—Canoes.

Loch Doon, Ayrshire—Canoes.

Castlemilk, Lanarkshire—Canoe.

Drumduan, Aboyne, Aberdeenshire—Canoe.

Baikie, Forfarshire—Bones of deer; bronze vessels.

Crannogs—Islands artificially formed on wood, or surrounded with piles.

Dowalton, Wigtonshire.

White Loch of Mertoun, ditto.

Lochrutton, Kirdkubrightshire.

Carlinwark Loch, ditto.

Loch Kinder, ditto.

Lochmaben, Dumfriesshire.

Corncockle, parish of Applegarth, ditto.

Loch of Sanquhar, ditto.

Greenknowe, parish of Culter, Lanarkshire.

Dhu Loch, Buteshire.

Barein, parish of Colvend, Kirkcudbright.

Loch of Moy, Inverness-shire.
 Loch-an-Eilan, or Lake of Rothiemurcus, Morayshire.
 Loch Lomond, Dumbartonshire.
 Loch Lochy, Inverness-shire.
 Queen Margaret's Inch, Loch of Forfar, Forfarshire.
 Loch Canmor, Aberdeenshire.
 Loch Tummel,¹ Perthshire.
 Lochcote, Linlithgowshire.
 Loch Tullah, in Glenurchay, Perthshire.
 Loch of the Clans, Morayshire.

Artificial Islands of Stones and Earth.

Loch Tay, with causeway, Perthshire.
 Loch Tay, ditto.
 Loch Earn (Neish's Island), Perthshire. (Old Stat. Acc. xi. 180; Anderson's Guide to the Highlands, pp. 428, 429. Lond. 1834.)
 Loch Rannoch; stone island with causeway, Perthshire. [Isle of the Loch of Rannoch, and fortification thereof, pertaining heritably to James Menzies of that ilk.² (Regist. Secret. Concil. Acta, 1563-1567, p. 24.) Mr Robertson's Notes.]
 Loch Achray, Perthshire.
 Fasnacloich, in Appin, Argyleshire.
 Loch Borra, Sutherlandshire. Artificially constructed of stones, surrounded by a wall of stones. (Old Stat. Acc. vol. x. p. 303.)
 Duffus, Morayshire.
 Loch Freuchie, in Glenqueach, Perthshire.
 Loch Kinnard, in the hill above Grandtully, ditto.

Natural Islands which have been fortified.

Loch Fergus, Kirkcudbright.

¹ On 15th March 1528-9, John Earl of Athole had seisin "terrarum de Lochtymmele cum insula et domo ejusdem terrarum de Kirktoune Strowane nuncupata le Clauchane."—Lib. Responsionum in Scaccario, 1527-1539. MS. Gen. Reg. House. [Mr Robertson's Notes.]

² The Isle of Loch Rannoch is the subject of a stanza in Duncan Laideus' Testament, Black Book of Breadalbane. [Ibid.]

Carlinwark Loch, Kirkcudbright.

Loch Urr, with causeway of stone, ditto.

Moulin—Castle on island, with causeway. (Old Stat. Acct. vol. v. pp. 69, 70.)

Macnab's burying-ground in the Dochart, near Killin, has a strong earthen rath in the middle, and the burying-ground, called M'Nab's, at the end.

Loch of Cleikimin, a freshwater loch, near Lerwick—A causeway to shore. [Mr Robertson's Notes.]

Inis-na-Cardoch, called Eilean Mhurich, now called Derry Island, a small island in Loch Ness, a fortress of Lovat's about 1467. [Local Tradition; Mr Robertson's Notes.]

Loch of Cluny, Perthshire. Enlarged and fortified by an artificial barrier of stones.

Other Islands.

Ochiltree, with the loch and isle of the samyne. (Act Dom. Conc. et Sess. vol. xv. fol. 60.) [Mr Robertson's Notes.]

Loch Finlagan Isle, with causeway, Argyllshire.

Loch Shin, Sutherlandshire.

Loch Dolay, ditto.

Loch Yetholm, with causeway, Roxburghshire.

Loch of Rescobie, Forfarshire.

Assye.—Carta Regis David II. de terris de quatuor davatis terre de Assynete una cum forcelata insule eiusdem. (Robertson's Parl. Rec. p. 89.) [Mr Robertson's Notes.]

Strathnaver, Islay, Colonsay, Tiree, South Uist, Benbecula, North Uist—Many fresh-water lakes in these localities, with islands, on which are forts.

Morall, in Stratherne, Perthshire.

"Terras meas de Port cum insula earundem vulgariter vocata Morall." (Charter dated 8th Nov. 1580, by Wm. Drummond of Meggour to Patrick Lord Drummond. Reg. Mag. Sig. xxxv. 474.) [Mr Robertson's Notes.]

Loch Tay.—In a memorial presented to King Edward I. in 1306, by Malise, Earl of Strathern, is this passage:—

"Le Cunte d'Athoile s encourec a dist a son Roy (Sire Robert de

Brus) pur derumpir son conduit et assigner certaine gentz ceo est asavoir Sire Niel Cambel et Sire Water de Logan a garder le Cunte que il ne se alaist et envoya sa gente d'Athoil entre Abberledene et le yle de Kenmor issy que le Cunte ne puet entrer en l yle, eux tute voies destruiant et proiant le pais."

It appears that the Earl of Strathern had his abode in an island.

"Et quant il fut prest et munte de venir a la vile de Saint Johan a Monsire Aymer donques vient Sire Robert de Brus asieger l yle ou le Cunte estoit et fist proier et destruire le pais," &c. (Sir F. Palgrave's Documents on Scot. Hist. pp. 320-321.) [Mr Robertson's Notes.]

Loch Granech, in Strowan Athol, Perthshire.—Mr Robertson notes, "on the 25th August 1451, King James II. grants to Robert Duncane-sone of Strowane, the lands of Strowane, the lands of Romach, Glenarach, the two Bohaspikis, 'terras de Granech cum lacu et insula lacus ejusdem,' Carrie, Innycradoure, Farnay, Disert, Faskel, Kylkere, Balnegarde, Balnefert, Glengary, with the forest in the Earldom of Athol and Sherifffdom of Perth, erected into the Barony of Strowane, 'pro capcione nequissimi proditoris quondam Roberti le Grahame,' " &c. (Reg. Mag. Sig. iv. p. 227.)

Lochindorb.—The castle stands on an island of the size of about an acre. "Great rafts or planks of oak, by the beating of the waters against the old walls, occasionally make their appearance, which confirms an opinion entertained of this place, that it had been a national business, originally built upon an artificial island. Tradition says, and some credit is due to the report, that the particular account of this building was lost in the days of King Edward I. of England." (Old Stat. Acc. vol. viii. p. 259.)

Loch of Moy.—An island near the middle, consisting of about 2 acres of ground, on which the Laids of Mackintosh had a strength.

"At the distance of some hundred yards from this there is an artificial island, formed by heaping a parcel of long, round stones upon each other. This place was used as a prison, and is called Ellan-na-Glack, *the Stoney Island*." (Old Stat. Acc. vol. viii. p. 505.)

Port-an-Eilean, the harbour of the island.—"In an island of Lochvennachar, opposite to this farm, there has been a castle, a place of strength. *Port* is evidently the same word with *portus*, and has the same signification." (Old Stat. Acc. of Callander, vol. xi. p. 614.)

In a very small island of Lochard are still to be seen the ruins of a castle, supposed to have been built by Duke of Albany, uncle to James I. (Old Stat. Acc. vol. x. p. 130.)

Blairgowrie.—In the middle of one of the many lochs in this parish is a small island, with remains of old buildings on it. (Old Stat. Acc. vol. xvii. p. 195.)

MONDAY, 10th April 1865.

JOSEPH ROBERTSON, Esq., Vice-President, in the Chair.

The following Gentlemen were balloted for and elected Fellows of the Society :—

The Rev. ROBERT RAINY, D.D., Edinburgh.

WILLIAM F. COLLIER, LL.D., Edinburgh Academy.

JAMES CHALMERS, Esq., Printer, Aberdeen.

The Donations to the Museum and Library were as follows, and thanks were voted to the Donors :—

(1.) By WILLIAM FORBES of Medwyn, Esq., F.S.A. Scot.

Celt of dark-coloured Flint, rubbed smooth on its surface, and measuring 5 inches in length, by two inches across the cutting edge ; and

Two Whorls, or Buttons of Stone, $1\frac{1}{4}$ inch in diameter. One of clay slate, is rudely ornamented round the edge and on both sides with incised lines ; the other is of trap. The celt and whorls were found at South Slipperfield, near West Linton, Peeblesshire.

Six Spurious First Brass Coins of Claudius, Nero, Vitellius, &c., of modern manufacture, and Six Third Brass of Constantine the Great ; purchased at the new station of the South Eastern Railway, Cannon Street, London, and stated to have been found by the navvies employed there.

(2.) By FOUNTAINE WALKER of Foyers, Esq., F.S.A. Scot.

Two beautifully formed Celts of fine grained dark-green Serpentine (?) ; one measures $12\frac{1}{2}$ inches in length, and 4 inches across the cut-

ting edge; the other measures $9\frac{1}{2}$ inches in length, and $2\frac{1}{2}$ inches across the face; the opposite extremity of each is tapered off to a sharp point.

Cylindrical-shaped Implement of Porphyritic Stone, with the ends rounded off to blunt points; it measures 11 inches in length and $2\frac{1}{2}$ inches in diameter.

These three implements were found several years ago, along with another smaller celt, in a cairn in a wood lying between Lochs Drumashie and Duntelchaig, in the parish of Daviot, Inverness-shire.

There is a tradition in the district that one of Fingal's battles was fought there.

Silver Signet Ring, with a large oval-shaped setting of glass paste, in imitation of red cornelian, on which is a bust of William Duke of Cumberland looking to the left, with the legend *W. D. OF CUMBERLAND*. It was found near Inverness.

(3.) By Admiral Sir ALEXANDER MILNE, Knt.

Portion of a Hypocaust, consisting of three sandstone pillars, each measuring 2 feet in height and 9 inches in diameter, which support a stone slab 2 feet 6 inches square, and $3\frac{1}{2}$ inches thick. On the upper surface of this stone is a layer of concrete or conglomerate of lime, pebbles, &c., 6 inches thick. It formed part of the remains of a Roman Villa discovered at Inveresk, near Musselburgh, in the year 1783. An account of the discovery was communicated to the Society at the time by Mr Adam de Cardonell, and is printed in the *Archæologia Scotica*, vol. ii. page 160.

Mr Cardonell also presented to the Society's Museum various remains found in excavating the Villa, including two portions of red earthenware pipes, a portion of a terra cotta statue, a hand pressing grapes, roebuck horns, &c., &c.

(4.) By JAMES FINLAY, Esq., Grantown, Inverness-shire.

Slab of mica schist stone, measuring 3 feet 6 inches in length by 16 inches in breadth, and from $2\frac{1}{2}$ to $3\frac{1}{2}$ inches in thickness, on the face of which is incised the half of the crescent and sceptre symbol, or ornament, and the Z or zigzag ornaments, with foliated ends, of the "Sculptured Stones of Scotland." It was found near Finlarig, Perthshire.

Block of Mica Schist, measuring 4 feet in length, 10 inches in breadth,

and 9 inches in thickness. On the face of the stone is incised the figure of a red deer, measuring 8 inches from the snout to the tail, and under it there is an oblong figure, measuring $5\frac{1}{2}$ inches in length by $3\frac{1}{2}$ in breadth, through the centre of which a line is cut lengthways; and the upper and lower opposite corners are carried outwards in a spiral ornamental curl.

The stone was found about two feet below the surface, while trenching a small knoll called Knock-an-Fruich. It was intended to have been carted away for the purpose of being converted into the step of a stair, from which purpose it was rescued by the donor.

(5.) By WILLIAM DOUGLAS, Esq., R S.A.

Bronze Three-legged Pot, having loops for handle projecting on each side of the mouth, and measures 13 inches in height by 10 inches in diameter across the mouth. It is ornamented on the outside with two slightly projecting parallel ribs or bands, which surround the bulging portion of the pot.

Iron Three-legged Pot, measuring 8 inches in height and 9 inches across the mouth. The body of the pot projects outwards in a globular manner below; the upper portion being straight, and 3 inches in breadth; and on each side of the mouth is a projecting loop for the handle.

Portion of Blue-coloured Glass, and a portion of Green-coloured Glass. One side of each of the pieces displays an interlaced pattern, painted in white. They were brought from the Church of St Paul, Rome.

(6.) By ANDREW JERVISE, Esq., Corr. Mem. S.A. Scot.

Circular disc of Sandstone, measuring in diameter $4\frac{1}{2}$ inches, and $1\frac{1}{2}$ inch thick, through which is cut a perforation $1\frac{1}{2}$ inch in diameter. It was found near the ruins of Whistleberry Castle, Kinneff, Kincardineshire.

Octagonal-shaped Brass Medal, $1\frac{1}{2}$ inch in length. On the obverse is a figure of St John, and on the reverse the Virgin and Child, both in relief. The medal was found while digging a piece of garden ground near the supposed site of Bishop Carusck's Tower, High Street, Brechin.

(7.) By MAJOR THOMAS, Ballantyne House, through J. NEISH, of the Laws, Esq., F.S.A. Scot.

Block of Gray Sandstone, measuring 12 inches in length by 8 in breadth, and 6 inches in thickness. On one side is sculptured in high

relief a portion of a human figure, with a flowing robe from the waist downwards; it shows also portion of an arm, and a necklace, or chain, with pendent. It was found when taking down some old walls at Bannatyne, or Ballantyne House, Newtyle, Forfarshire.

A contract is extant "for building a house at Newtyle, between Thomas Bannatyne, a Lord of Session, and John Mylne, and George Thomson," dated 1589. Lord Bannatyne was the elder brother of the well-known collector of the early Poetry of Scotland.

(8.) By Mr THOMAS HARDIE, National Gallery.

Lady's Long Glove, or Gauntlet, of yellowish coloured leather, with a richly embroidered pattern in gold thread and red silk on the flaps, or portions that cover the wrist.

(9.) By ROBERT HUTCHISON of Carlowrie, Esq., F.S.A. Scot.

Portions of Four Human Skulls, taken from long-shaped stone cists or coffins, recently discovered near the Catstane, Kirkliston. (See Mr Hutchison's Communication, page 184, Plate XIV.)

(10.) By HENRY CHRISTIE, Esq., London, and M. E. M. LARTET, Paris.

Slab of Breccia, measuring 20 inches broad by 2 feet 3 inches in length, and 3 inches in thickness, from the floor of a cave at Les Eyzies, Dordogne, France.

This breccia contains flint implements and flakes, bones of the reindeer, birds, and fish, left in the cave by the ancient inhabitants. The caves and their contents are fully described in the work by Messrs Lartet and Christie, entitled "*Reliquiæ Aquitanicæ*; being contributions to the Archæology and Palæontology of Périgord and the adjoining provinces of Southern France." 4to.

(11.) By ADAM B. MESSER, M.D., Royal Navy, through JOHN ALEX. SMITH, M.D., Sec. S.A. Scot.

Axe Head of Greenstone, measuring $6\frac{1}{2}$ inches in length, and 3 inches across the cutting face; found in a Maori pah, near Rangiahia, in the Waikāto District, New Zealand.

Wooden Handle, 15 inches long, with cross head 5 inches long; for a stone celt or iron chisel. It is formed of the branch of a tree, to which

part of the main stem is left attached at a right angle, and shaped to allow the celt or chisel to be fixed to it with cords of flax. It was found at Ngaruawahia, on the Waikāto River, New Zealand. Similar handles are still in use by the Maories, to which they often attach an English steel chisel. They are then used like an adze for excavating their canoes.

Rounded Pestle, or Pounder, of Dark-coloured Stone, measuring 10 inches in length by 4 inches in diameter at the thick end, which is bluntly rounded off; the upper portion is tapering, and slightly hollowed, so as to form a handle. It is still much used by the Maoris for crushing maize or fern root, &c. Found at Paitai, on the Waikāto River, New Zealand.

A Tomahawk or Club, formed from a bone of the whale; it measures 16 inches in length, and $2\frac{1}{2}$ inches across at the wood or blade end, by 1 inch in thickness at the extremity of the handle, and is pierced with a square hole. It is ornamented by incised scrolls on both sides, and was found in a chief's house near Ngaruawahia, on the Waikāto River, New Zealand. This is a very rude specimen of a weapon much used by the Maories, and is made in a great variety of shapes and materials. Some of the bone clubs are beautifully proportioned, carved, and polished; red sealing wax is much admired by the natives, and is frequently put on in patches, for ornament; traces of it are seen on this club.

Implement formed of a cylindrical-shaped portion of Bone, measuring $5\frac{1}{2}$ inches long, $\frac{5}{8}$ of an inch in diameter, with a handle 3 inches long. A hole is pierced through at $1\frac{1}{2}$ inches from the lower extremity, which is cupped and concave. The implement is of one piece of bone, and was found in the Maori pah at Rangiriri. It is supposed to have been used by the natives in making cartridges for their muskets.

(12.) By JOHN STRATH, Esq., Engineer, Sydney, Australia.

Bomerang of Close-grained Wood, measuring 21 inches between its two extremities, and $2\frac{1}{2}$ inches in breadth across the middle of this curious implement.

Waddie or Club of Close-grained Wood, measuring 2 feet in length; it increases gradually in thickness, from the handle, which is $\frac{5}{8}$ of an inch in diameter, to the other extremity, which is 2 inches in diameter.

(13.) By THOMAS BRODIE, Esq., F.S.A. Scot.

Original MSS. "List of the Poker Club, 1768," showing (opposite to

the names of the members) "the sums incurred, whereof paid, time when paid, arrears," &c., arranged in separate columns. The list of members includes the names of the Rev. Dr Alex. Carlyle of Inveresk, Dr Adam Ferguson, Lord Elibank, Baron Grant, David Hume, Professor James Russell, W. Grahame of Gartmore, Sir Adam Ferguson, the Earl of Dunmore, Earl Marischal, Lord Eliok, and other celebrated men of that date.

(14.) By GEORGE TATE, Esq., Alnwick, Corr. Mem. S.A. Scot.

Proceedings of the Berwickshire Naturalists' Club. Vol v. No. 2. 8vo. 1864.

(15.) By THOMAS JONES, Esq., Keeper of the Chetham Library, Manchester.

Bibliotheca Chethamensis: sive Bibliothecæ Publicæ Mancuniensis ab Humfredo Chetham Fundatæ, Catalogi tomus IV. Edidit Thomas Jones, B.A. 8vo. Manchester, 1862.

There were exhibited—

(1.) By Sir ADAM HAY, Bart., of Smithfield and Haystoune, Peeblesshire.

A Bronze Three-legged Pot, with projecting loops at the side for the handle. It measures 9 inches in height, and $7\frac{1}{2}$ inches across the mouth. Bronze Three-legged Pot or Ewer, 8 inches in height, $3\frac{1}{2}$ inches across the mouth, with a spout and handle. These vessels were found several years ago near Peebles.

(2.) By Mr JOHN NICHOLSON, Bookseller, Kirkcudbright.

Small Pot or Patella of yellow-coloured Bronze, measuring $4\frac{1}{2}$ inches across the mouth, and 3 inches in depth. It tapers from the mouth towards the bottom, which is $2\frac{1}{2}$ inches in diameter. The handle projects from the rim; it is flat, and measures 4 inches in length. The whole of the outside of the vessel, and the upper side of the handle, is covered with enamel, arranged in ornamental scrolls, leaves, &c. The colours are blue, green, and red.

(3.) By Mr THOMAS EDWARD, Curator of the Museum, Banff.

Bronze Article, in form somewhat resembling a pig's head (?), with moveable under jaw; found many years ago in digging in the parish of Deskford, Banffshire.

I.

NOTICE OF STONE-CISTS DISCOVERED NEAR THE "CATSTANE,"
KIRKLISTON. BY ROBERT HUTCHISON OF CARLOWRIE, ESQ., F.S.A.
SCOT. (WITH DIAGRAM.)

The historical interest attaching to the "Catstane," since the attention of antiquaries has been more particularly directed to its probable origin, by the publication, a few years ago,¹ of Professor Simpson's elaborate paper on the subject, induced me, on 6th April 1864, to reconnoitre the field in which that venerable monolith stands, with the view of finding, if possible, some remains of the large tumulus which is reported to have formerly stood about sixty yards to the west of the "Catstane," and is said to have been opened in 1824, and found to contain several complete skeletons; but "nearly all traces of which," according to Professor Daniel Wilson, in his *Prehistoric Annals*,² "have now disappeared."

Having carefully examined the place indicated, and dug over a considerable area around the supposed site, without success, I was induced to try a little to the eastward of the "Catstane," partly from the position of the inscription upon the stone (which faces the east), and partly also from the appearance of the ground, which at that point, a few yards distant from the "Catstane," assumes the form of a slope or knoll, the "lie" of the ground being to the south and east, and the stone itself having been apparently placed at the north-west corner of this tumulus.

The soil throughout this knowe is different from that of the rest of the field, having evidently been "travelled" or "forced," and the mound raised in this manner upon the original ground-level. The earth is friable, dry, and sandy, and free from stones, while the soil of the rest of the field is of a tilly clayey nature, and is studded in some places, about a foot under the surface, with the common clay boulders, or land-stones which abound in the district.

Although unsuccessful in finding any trace of the tumulus mentioned to the west of the "Catstane," I was fortunate in finding what I shall now describe, seeing its existence has hitherto been unknown.

¹ *Vide* Proceedings of the Society of Antiquaries of Scotland, vol. iv. p. 119.

² *Prehistoric Annals of Scotland*, p. 96.

We had hardly dug down into this knowe more than a foot, at a point about twenty yards from the "Catstane," when we came upon a large flat stone, which, on being struck, sounded hollow. Clearing away the loose earth, we found the cist marked in the diagram, third from the top of line D.

The cists on either side of this one were next discovered, and then the others in the same row, which terminated at the foot of the knowe with the small grave marked S in the diagram. This row contains thirteen cists.

The coffins in this, and in all the other eight rows, lay in regular order, side by side, with about a foot of space between each, and all faced due east. This point was carefully tested by the compass, and in no instance, except in that of cist marked T in line B, did this position vary, and I am inclined to believe from the displacement of some of the slabs forming this grave, that the difference in its position is the result of subsequent accidental interference, and has probably been caused by agricultural operations of a later date. Indeed, seeing that the average depth of all the cists from the surface of the ground is only about fifteen inches, it is rather singular that they should have so long escaped not only discovery, but also absolute destruction. In many places the marks of the plough-irons, grazing along the surface of the cist-covers, were quite visible; and this is, I think, an important point, tending to prove that the interments were all made at one time; for although the exact regularity of the cists, and the respective rows in relation to each other, seem to me of itself almost a sufficient proof that they were all placed there at one time, this supposition is strengthened, when we find the slabs forming the covers so level, and equally laid, and so firmly placed together, as to present a compact pavement-like surface, which could only be formed by their having been laid simultaneously *in situ*, and then regularly and carefully earthed over, and covered up.

The number of cists found was fifty-one; and I believe we discovered all the graves which ever existed to the east and south of the "Catstane;" and although a careful search was made to the westward and all around, no traces whatever of any other interments or mounds were found.

The coffins are all of the usual "long-cist" character, composed chiefly of rude, irregular, unhewn slabs of yellowish freestone, which varied in thickness from about one and a-half to three inches, each piece of stone being about two feet to three feet, and in a few instances four feet in length, and about eighteen inches broad. It was observed that thirteen of the graves were composed entirely of a black shaley stone, in pieces of similar dimensions to the freestone slabs. These were invariably the smallest cists found, and in no case was any coffin found composed partly of freestone and partly of black shale.

Those of black shale are marked on the diagram P.

I specially mention this fact, because it seems to me that the employment of a different kind of stone material in the construction of the smaller cists, tends to indicate that these coffins contained the bodies of a people, or race, distinct from those interred in the large cists of freestone. This conclusion is greatly strengthened by the result of the ethnological examination of portions of the crania which were taken from some of the graves. Portions of four of the skulls have been put together and patched up by my friend Mr Turner, and are now on the table; and his report upon them will be afterwards read to this meeting.

Careful measurements were made of all the cists, and a table showing these is appended to this paper. The smallest grave measured in length only 2 feet 4 inches, while the longest was 6 feet 9 inches. Three cists measured 6 feet 9 inches.

The average length of the black shale graves is 5 feet $4\frac{2}{3}$ inches; while the average length of those composed of freestone slabs is 6 feet $1\frac{5}{8}$ inches; and it may be worthy of notice that while the difference in length of many of the cists is considerable, the variations in their breadth are immaterial. This probably shows that they all contained the bodies of adults; indeed this is pretty certain, because the crowns of the teeth found in some of the shorter black shale graves were as much worn on the edges as those found in the longest freestone cist.

All the coffins seem to have been built after the same fashion; but one of them calls for special notice, as different in its construction from that of the others. The cist referred to is the small one marked S at the south end of row D. It measures only two feet 4 inches in

length, 12 inches in breadth, and 20 inches in depth, being thus considerably deeper and shorter than any of the rest. Instead of being composed of slabs of thin stone or shale, it was regularly *built* of ordinary shaped stones, which bore no appearance of having been artificially fashioned or hewn, but seemed rather to be the common land or boulder stones, and were similar to those employed in packing round the slabs of the other cists as supports or partition walls. There was no stone bottom to this grave, and no trace of bones was found in it; but upon the natural level of the soil inside, which was here of a gritty nature, we observed the blackened charred appearance of what seemed to have been a fire. I confess I am unable to offer any conjecture as to this curious little grave, unless, perhaps, it may have been a cremation interment; yet why one solitary instance of the kind should occur amongst so many interments of a different description, is singular enough; especially as we know that a small grave has repeatedly been found in other barrows, similarly situated at the extreme south end of a row. For example, a small cist exactly the same in build, dimensions, and position in relation to the others, was found last year at Burnhouse (which is about six miles west from the "Catstane"), in conjunction with other six long cists which were found in a field, where like discoveries have from time to time been made.

In both cases the small cist is placed a little apart from the general line of graves, being about 4 feet from the nearest cist. These had no covers.

In noticing the difference in the construction of this small grave, it should be stated that when the "Catstane" was dug under by Professor Simpson and myself in 1861, we found it stood over what was distinctly the side walls of a built grave identical in masonry and material with this small cist; and this is worthy of note, as it connects the "Catstane" itself with this small cist, and, consequently, although indirectly, with all the other intervening graves.

The mode of sepulture generally employed at this barrow appears to have been somewhat in this manner. Large slabs having been placed upon the natural surface of the ground, without any excavation, the corpse was stretched upon these; the side and end slabs were then placed on edge, forming the walls round the body, and these were then supported by boulder-stones and earth thrown round them; the covers were

then carefully laid in their position, and the earth heaped over the whole, and piled up till the mound or tumulus was thus raised. Monoliths were probably set to mark the site and the boundary of the place of interment.

In opening the cists nothing was found but fragments of human bones, very much decayed, and which broke and crumbled away at the slightest touch. The sand had silted into the interior of the graves, and completely filled the interstices between the joints of the stones. The lower part of each cist contained the usual fatty clay of a black colour, in which were abundant traces of bones. The corpses had been laid at full length, and in all cases faced the east, and in most instances the arms were extended by the sides; although, in a few cists of freestone, the hands appeared to have been crossed over upon the thighs, a position which could not be found in any of the cists of black shale, in which the arm-bones were invariably found stretched down the sides.

My attention was particularly called to this circumstance as I minutely examined each cist for the bones of the hands, wrists, and arms, in search of armlets, rings, or other ornaments.

Although careful search was made, no urn, trinket, or weapon of any description was found in or around any of the cists; nor did they present the slightest appearance of having ever been previously disturbed.

There were no artificial incisions or markings of any sort upon any of the covers; the only unusual object found was the white lump of hard mountain limestone now produced, which was found close to the small grave S., and which, from its hardness as well as its shape—being naturally flatter and more pointed at one end than the other—may not improbably have been used as a rude hammer in fashioning the slabs and lids of the cists. This is a stone quite unknown in the district; and the stones composing the cists themselves must have been brought from a considerable distance. A freestone, of similar nature to that employed, abounds along the coast at Queensferry, three miles distant; and the black shale was probably found in a quarry which crops out on the bank of the Almond, in the Craigiehall grounds, about a mile and a half distant from the "Catstane," and to which spot, at the present day, during harvest time, reapers resort for pieces of this black shale to be used as whetstones for their sickles.

At the north-eastern corner of the burial-ground, and at a distance of about twenty yards from the nearest cist, at the spot marked K on the diagram, about two feet under the surface, and upon the natural soil, traces of a large fire were found, and close adjoining it we discovered several bones. These were evidently not human remains, as that now produced will show, which was probably the one in best preservation for removal.

Lhwyd, the distinguished and accurate Welsh archæologist, writing, in 1699, in reference to the "Catstane," supposed it to be the tomb of some Pictish king, and describes it as "an area of about 7 yards diameter, raised a little above the rest of the ground, and encompassed with large stones; all which stones are laid lengthwise, excepting one larger than ordinary, which is pitched on end, and contains this inscription, in the barbarous characters of the fourth and fifth centuries:—'In oc tumulo jacet Vetta F. Victi.'" Four of these large encircling stones he refers to we found lying close together, about three feet under the surface, at the north end of the rows of graves, as shown in the diagram; and, from their position, they appear to have been thrown from their original situation into a deep hole dug for their reception, to be out of the farmer's way in conducting field operations. They are similar to the "Catstane" itself, but smaller, being rough, undressed masses of secondary green-stone trap, varying in size from 5 feet to 6 feet long, and from 2 feet to 3½ feet broad, and from about 18 inches to 2 feet 4 inches thick. Although carefully washed and examined on every side, none of them bore any trace of an inscription, or showed any artificial dressing or tool-markings whatever.

The only other noticeable feature in this spot of primitive sepulture was the fragmentary portion of an encircling rude wall, which we found extending along the north side, and which had probably originally enclosed the area of the graveyard. The height of the most entire part found was about 18 inches to 2 feet; and more fragmentary portions were observed extending along the north-east end of the cists; and beyond this line no cists were discovered.

There was no artificial dressing upon the stones, which seemed to be common land-stones; and the dyke had been built of these alone, without any cement or lime.

The question now occurs, Who were the occupants of this primitive place of burial, or to what era in the early annals of the district do they belong?

In the absence of any relic, weapon, or other collateral proofs to guide us in endeavouring to arrive at a satisfactory answer to this difficult and perplexing inquiry, the first circumstance connected with the cists that requires notice is their position, which, as we stated, is due east and west. We found that in every instance the body had been laid to face the east; and to many this may appear sufficient proof of Christian burial, and a not very ancient date might accordingly be assigned to the cists.

I do not think, however, that the mere direction of either the body or the cist is at all conclusive proof of either Pagan or Christian interment. No doubt it is possible, and, indeed, instances do occur to show that in early times regard was paid to the direction in which the body was disposed in burial; but I do not think we would in the present instance be justified in asserting, without better evidence, that the occupants of the "Catstane" cists, were Christian. Other considerations than those of religious rites and superstitions might lead to the disposition of the cists east and west. Convenience might have had something to do with it, or the first interment may have, by chance, been laid in that direction, and others would follow, and the regularly methodic arrangement of the cists which we found to exist may have led to all lying in one direction; and the desire to lay their dead in the small rising *dry* ground in an otherwise damp, wide, reedy plain, may have also led to a carefully methodic arrangement of the graves for their better preservation. It must also be borne in mind that the near proximity of the river Almond to the graveyard—being hardly a hundred yards distant—and the frequent flooding to which this and the adjacent fields were continually exposed, naturally led to the bodies being buried on the *dry* side of this little knowe, protected from the river's incursions; and had they been laid in any other direction than east and west, they would have presented a much more destructible front to the inroads of the river.

Another element for consideration in attempting to arrive at the probable date of these interments, is the fact that they are found in a district the possession of which was fiercely contested for centuries by the

Romans against the various aboriginal tribe, assisted by the Saxons and the Danes.

The frequency also with which stone cists, much akin in construction to those now under notice, have been found, both in groups and in solitary instances, in the neighbourhood of the "Catstane," and scattered over a wide extent of the surrounding country, points to the existence, at a very remote period, of a densely-populated province immediately to the south of the Wall of Antoninus.

These scattered cists, in so far as I have seen them, present analogous, but not identical, features to those found around the "Catstane." In all other cases—for example, as at Cramond, Craigiehill, Carlowrie, Dalmeny, Hanley, Gogar, Ingliston, Eastfield, Lochend, Newliston, Newbridge, Cliftonhall, Calder, Burnhouse, and Broadlaw—the *materials* of their construction appear the same; but in no other instance that I have been able to find out have so many cists been found together—most of the barrows consisting merely of a few graves, which were hardly so methodically arranged, although somewhat similar to those under notice. Occasionally a solitary cist has been found, as at Craigiehill, Dalmeny, and Carlowrie, and in none of these cases does regard seem to have been paid to the east and west direction of what otherwise seem identical cists; for in them the bodies had been laid north and south.

Lately a similar freestone slab cist was found at Standing Stone, near Dalmeny, during the progress of the branch line of railway to Queensferry, which lay north-east and south-west. A similar but *short* cist was found by myself at Carlowrie, a few years ago, which lay north and south in a position within half a mile of the "Catstane;" and the thirteen found several years ago on the banks of the Almond, opposite the field in which the "Catstane" stands, lay facing south-west. These were also *short* cists, and I am inclined to think they belonged to a still earlier date than those we are now considering, and were probably the graves of the aborigines of the district, because twenty-seven precisely similar cists were found when cutting away a "brae" from the old Roman road which originally led close past the "Catstane," and on removing the causeway-like metal with which this road is formed, to cut the "brae" away, the cists referred to were found underneath, and were broken up for road metal. This circumstance I have learnt from an old man who still

works as surfaceman upon the parish road, and who assisted at the straightening and levelling the road at the time. The spot where these twenty-seven pre-Roman cists was found is within 300 yards of the "Catstane," and farther to the south; and I lately had the curiosity to dig at the spot indicated, when I found the remains of two rude short cists of the same freestone material, and otherwise similar (excepting in length) to the "Catstane" graves.

The change to a more regular and systematic mode of burying the dead might result from an improvement in the social condition of the inhabitants, caused either by the introduction of a new tribe of allies, or by the forcible intrusion of some foreign race, whose manners and customs may have displaced the older, ruder, and more irregular customs of the land.

If, then, the systematic disposition of the body and the encircling cist in one direction in burial, and the much larger number of interments in one place, as found at the "Catstane," be indicative of a progressive advance, or change, or introduction of other races amongst the primitive inhabitants of the country, and taking into account the employment of the two distinct materials for cists as well as the two types of crania found in these cists, may this not be the resting-place of the VECTURIONES?—a mixed race—of whose existence, about A.D. 364, in this country, we have the contemporary historical testimony of Ammianus Marcellinus,¹ who describes them as "that Saxon host, leagued with the other Scottish tribes, the Picts, Scots, and Attacots in fighting against the Romans;" and again, in A.D. 368, as "Picts divided into the Dicaledonæ and Vecturiones," and who probably derived their name from their leader VETTA the son of VICTI, of the royal house of Woden, whose rude but lasting memorial throughout so many centuries has been, and is, the "CATSTANE."

¹ Ammiani Marcellini Historiarum, lib. xxviii. c. 1.

††	*	††	C	††	D	E	**	†††	
A	B	4	12 SA	25	F	G			I
1	2	5	13	26	33	41			50
P	3	6	14	27	SB 34	42			51
	T	7	15	28	SC 35	43			
		8	16	29	36	44			
		9	17	30	37	45			
		10	18	31	38	46			
		11	19	32	39	47			
			20	40	P				
			21						
			22						
			23						
			24 S						



STONE CISTS DISCOVERED NEAR THE "CATSTANE," KIRKLISTON.

Note.—The cists are indicated by — lines, and are arranged in the order in which they were found. A table of their measurements is given on the next page. Portions of skulls were found and removed from graves Nos. 12, 34, 35, and 49, and are reported upon by Mr Turner in the following Appendix to this paper.

* Catstane.

†† Low walls.

** Four large stones.

††† Traces of a large fire.

Inside Measurements of Freestone Cists.

No.	Length.	Breadth.	Depth.	No.	Length.	Breadth.	Depth.
2, . .	6 ft. 3	× 24	× 15	33, . .	6 ft. 6	× 24	× 15
3, . .	6 " 7	" "	" "	34, . .	6 " 9	" "	" "
4, . .	5 " 10	" "	" "	35, . .	5 " 11	" "	" "
5, . .	5 " 9	" "	" "	36, . .	6 " 3	" "	" "
8, . .	6 " 1	" "	" "	38, . .	5 " 10	" "	" "
9, . .	5 " 9	" "	" "	39, . .	6 " 5	" "	" "
10, . .	6 " 7	" "	" "	41, . .	6 " 9	" "	" "
11, . .	5 " 10	" "	" "	42, . .	6 " 0	" "	" "
12, . .	6 " 3	" "	" "	43, . .	5 " 9	" "	" "
13, . .	6 " 5	" "	" "	44, . .	6 " 0	" "	" "
15, . .	5 " 8	" "	" "	45, . .	6 " 7	" "	" "
16, . .	6 " 1	" "	" "	46, . .	5 " 11	" "	" "
17, . .	5 " 11	" "	" "	47, . .	6 " 5	" "	" "
19, . .	5 " 8	" "	" "	48, . .	6 " 2	" "	" "
20, . .	5 " 9	" "	" "	50, . .	5 " 11	" "	" "
22, . .	5 " 8	" "	" "	51, . .	6 " 5	" "	" "
25, . .	6 " 2	" "	" "	Average length, 6 ft. $1\frac{1}{2}$ each.			
27, . .	5 " 9	" "	" "	Small Built Grave.			
28, . .	5 " 10	" "	" "	24, . .	2 ft. 4	× 12	× 24
29, . .	6 " 0	" "	" "				

Inside Measurements of Black Shale Cists.

No.	Length.	Breadth.	Depth.	No.	Length.	Breadth.	Depth.
1, . .	5 ft. 6	× 22	× 15	30, . .	5 ft. 6	× 22	× 15
6, . .	5 " 2	" "	" "	31, . .	5 " 7	" "	" "
7, . .	5 " 6	" "	" "	32, . .	5 " 9	" "	" "
14, . .	4 " 9	" "	" "	37, . .	5 " 2	" "	" "
18, . .	4 " 8	" "	" "	40, . .	5 " 9	" "	" "
21, . .	4 " 10	" "	" "	49, . .	5 " 6	" "	" "
23, . .	5 " 6	" "	" "	Average length, 5 ft. $4\frac{1}{2}$ each.			
26, . .	5 " 8	" "	" "				

II.

REPORT ON SOME HUMAN CRANIA FOUND IN STONE COFFINS NEAR
THE CAT-STANE, KIRKLISTON. BY WM. TURNER, M.B.

In the month of April 1864, I received from Professor Simpson and Mr Hutchison of Carlowrie, portions of four human crania, which had been taken out of stone coffins, situated in a field close to the Cat-Stane, Kirkliston. The crania were, unfortunately, in a very fragile condition. The bones composing them were soft, and their cavities were filled with moist earth, which had washed into and almost filled the coffins. Although great care was taken in removing the earth from each skull, yet as soon as it lost its support, the bones separated into many pieces, some of which were so soft that they crumbled away even when gently handled. It was especially noted that the side of the skull which lay undermost was the softest, and most easily destroyed. With the utmost caution, I have only been able to preserve such fragments as are placed on the table; and of these only one skull gives an outline of both the cranial and facial form.

In the description, the skulls are designated *A*, *B*, *C*, and *D*.

A. Portion of a calvarium; the frontal, greater part of both parietals, and the apex of the occipital bones are present. The frontal, coronal, sagittal, and lambdoidal sutures are all open. The sex is uncertain, perhaps a male. The skull that of an adult, but not aged. In the frontal region there is an almost total absence of a glabella, and of superciliary ridges. There is no great elevation of the forehead; and the vault of the skull, formed by the posterior two-thirds of the frontal bone and the anterior two-thirds of the two parietals, is flattened, so that when looked at from above the vertex seems depressed. The parietal bones in their posterior one-third gradually slope down into the occipital region. The following measurements must be looked upon as approximate:—Greatest frontal breadth, 4·1 inches; extreme length, 7·1 inches; extreme parietal breadth, 5·2 inches; ratio of length to breadth, 100 : 73. The skull is therefore dolicocephalic.

B. Portion of a calvarium, consisting of the frontal and two parietal

bones. The coronal and sagittal sutures are ossified, though their position is marked by denticulations externally. The sex is apparently the male, and the skull is that of one beyond the middle period of life. The glabella and superciliary ridges, though presenting no great projection, are more strongly marked than in *A*. The forehead is also more square and massive, and the flattening of the top of the skull is more decided. The transverse measurements are greater than in *A*. The extreme frontal breadth is 4·6 inches. The extreme parietal breadth is 5·4 inches. The length of the skull-cap in its present imperfect state is 7 inches. If the occipital bone had been present, the length would of course have been greater, though from the downward slope of the posterior parietal region it is not probable that the antero-posterior diameter greatly exceeded this measurement. Calculated, however, at its present length, the ratio of length to breadth is as 100 to 77. The skull is therefore sub-brachycephalic rather than dolicocephalic.

C. Portion of a calvarium, consisting of the left half of the frontal bone, the left parietal and temporal bones, and a small part of the occipital. The sex is possibly that of a male, and the skull is that of one somewhat advanced in years, for the sagittal suture is completely ossified. The transverse measurements of the cranium it is impossible to take; but the extreme length, which is evidently a close approximation to the real length, is only 6·6. Hence this skull is in a marked degree shorter than *A* and *B*, and was most probably either brachy, or sub-brachycephalic.

D. This is the most perfect of all the skulls, for not only are the cranial bones, especially on the right side, in a better state of preservation, but many of the facial bones, including the right half of the lower jaw, are present. The skull is that of an adult, though not aged person. From the smoothness of the superciliary region, and the absence of any strongly-marked muscular ridges, the cranium might be taken for that of a female: the powerful horizontal ramus of the lower jaw, and the deep and projecting symphysis are, however, much more nearly allied to male characters. The sutures are unossified, but the basi-cranial synchondrosis is closed. The forehead is well formed: the tubera both of the frontal and parietal bones very fairly pronounced; the summit of the skull in the parietal region flattened, though the upper part of the

frontal bone does not participate in this flattening as in *B*. From the parietal eminences, the sides of the skull pass almost vertically downwards to the squamous parts of the temporal bones. From the broken condition of the occipital bone, it is difficult to say what its form might have been, though the downward slope of the parietals posteriorly points to a somewhat flattened condition of the occiput. The proportions of the skull may be gathered from the following table of measurements:—

	Inches.
Extreme length (approximative),	6·7
Ectorbital breadth,	3·6
Extreme frontal breadth,	4·0
Extreme parietal breadth,	5·1
Zygomatic breadth (approximative),	4·5

The length is to the breadth as 100 to 76. The cephalic index indicates a sub-brachycephalic type.

The surfaces of the crowns of the teeth in both jaws are ground down and flattened, and the dentine is exposed. The alveolar process of the upper jaw is deep, and the palate is highly arched and narrow.

It is much to be regretted that only four crania, and those unfortunately in a fragmentary state, were recovered from the large number of stone coffins exposed near the Cat-Stane, for a greater number and a more perfect condition might have assisted materially in throwing some light on the cranial characters of the people or peoples formerly occupying that part of the Lothians. This, indeed, was the more to be desired, for historical and archæological evidence alike lead to the conclusion that more than one race was in temporary occupancy of this district of Scotland during the earlier centuries of our era. Though some of the measurements which have been given are only approximations, yet they will, I think, indicate with tolerable precision the relative length and breadth of the crania; and from the description it will have been noted, that whilst one is a fairly marked dolicocephalic skull, the others are inclined to brachycephalism.

The difference between the longitudinal and transverse measurements of the skull marked *A*, and of those marked *B*, *D*, and *C*, might, indeed, weigh so far with some craniologists as to lead them to regard it as having

belonged to a different race—to, in fact, a longer and more oval-headed people. With but a single and very imperfect specimen on which to give an opinion, it may perhaps be more judicious simply to record its characters, without speculating further respecting the race to which it had appertained. The sub-brachycephalic character of the other crania is of considerable interest. Ethnologists have been hitherto in the habit of more especially associating, in this Island at least, short heads with short cists, and of regarding the occupants of the longer cists as a longer-headed race. Yet three of the skulls from the long cists of Kirkliston do not display the usual dolicocephalic characters, but approach much more closely to the brachycephalic form. The facts before us, therefore, so far as they go, point to the existence, in the Lothians, at a later period than that in which the mode of burial in short cists prevailed, of a people whose crania approached much more closely to the brachycephalic type than is exhibited by the men of the present day. With what race, then, are these people to be associated? Not, I think, with the Saxon; for the elongated, more oval form of the cranium *A*, approaches nearer to the Teutonic type than do either *B*, *C*, and *D*. Not to the Scandinavian, for here again the skulls under consideration approach too closely to the brachycephalic form. Much more probable is it, then, that they are the crania of members of that ancient British race—Picts, it may be—which occupied this district of our Island many centuries ago. And in this conclusion I am in general supported by Dr John Thurnam, to whom I sent sketches and measurements of the crania, and whose opinion on any craniological or archæological question bearing on the ancient inhabitants of our Island is worthy of much consideration.

III.

TRANSLATION OF AN ASSYRIAN INSCRIPTION ON THE SCULPTURED SLAB RECENTLY PRESENTED TO THE MUSEUM BY PROFESSOR J. Y. SIMPSON. By H. FOX TALBOT, Esq.

The Museum of the Society of Antiquaries of Scotland has been recently enriched with a noble specimen of Assyrian sculpture, being the munificent donation of Dr Simpson, one of the Vice-Presidents of the Society.

This sculptured slab represents Ashurakhbal, a monarch of the tenth century B.C., holding in his hand a cup of wine, with which he is about to offer a libation to the gods. This sculpture is accompanied by an inscription of twenty-one lines in very good preservation, of which I annex a translation.

This inscription is a well-known one, more than 100 copies of it having been found by Mr Layard while he was engaged in the excavation of Ashurakhbal's palace; for which reason it has been called the "standard inscription." Nevertheless, no translation of it appears to have been published.

Ashurakhbal was a great warrior and conqueror, but appears to have been destitute of any taste for literature. This may be inferred from the fact that he gave orders to inscribe the same inscription upon so many of the slabs which lined the apartments and galleries of his palace; whereas, if he had given upon each slab the description of some different battle, or other remarkable event of his reign, our knowledge of his career would now have been much more complete.

There have been found, however, two pavement slabs, engraved on both sides, at the entrance of the temple of Hercules on the mound of Nimrud, which give a much more full and perfect account of his reign and his conquests. These have been lithographed by the British Museum, and occupy ten plates (17 to 26) of one of their volumes of inscriptions.

The Assyrians wrote their annals on small terra cotta cylinders, several of which are in the British Museum. They are covered with close and crowded characters impressed on them, while the clay was soft, by a kind of *stylus*. These were, no doubt, when newly made, easily and conveniently legible. Besides these, the Assyrians had, doubtless, volumes written on papyrus which have not reached our times.

The inscriptions on the large sculptured slabs, such as the one now in the Museum, were in all probability seldom read. Several reasons concur to show this. In the first place, the inscription is treated as quite subordinate to the sculpture. When a line of writing meets the king's figure, it is suspended, often in the middle of a word, and the reader has to search for the continuation of the word at the distance of a foot or two, according to the breadth of the king's figure, or other interruption.

This may not be of much importance in the case of the first or last lines, but it is embarrassing in the central lines: it would be so even to an English reader, reading his own language, if he found half of each line written on one side of his newspaper, and half on the other side. Moreover, the terra cotta cylinders (which were intended for actual reading and frequent consultation) were neatly and methodically written, each line often commencing with a new subject. There is nothing of this kind of care and attention on the large sculptured slabs. A new subject almost always begins, without warning, in the middle of a line. The workmen being commanded to repeat the same formal inscription so often, grew inattentive, and bestowed all their care upon the king's effigy and the scene represented. A striking proof of this is afforded by the present inscription, line 14, in which the sculptor has carelessly repeated no less than sixty cuneiform signs which he had just written (only in the previous line!). These contain only some phrases in praise of the king which were certainly not repeated intentionally, since other usual glorifications of the king have been omitted, and a copious choice of them was at the disposal of the scribe.

Translation of the Inscription.

This is the palace of Ashurakbal, servant of Ashur, priest of Bel and Ninev, beloved by Anu and Dagon, worshipper of the great gods: the great king, the king of the nations, the king of Assyria. Son of Shimish-Bar the great king, the powerful king, the king of the nations, the king of Assyria: who was the son of Hubirga, also king of nations and king of Assyria.

The noble hero who went forth in the armed service of Ashur, his lord, against the kings of the four regions of the world, as none had ever done before; and smote the heretics who worship not the exalted things, in battles too numerous to be counted.

The king who humbled to the dust all those who did not obey him; and who subdued all the races of men. The great worshipper (*of the gods*): the trampler upon the necks of his enemies; the conqueror of hostile lands; the destroyer of powerful fortresses. The king who advanced in the arms of the great gods his lords, and seized with his hand

all hostile countries, fixed the tribute of all their territories, and took hostages from them as a pledge.

The favour of Ashur, who called me to the sovereign power, and is the supporter of my throne, gave his irresistible arms into the hands of my Majesty. The armies of the wide world I overthrew in battle.

By the help of the Sun, and Yem the god of the Sky, the gods to whom I trust, I conquered the armies of the Highland Nahiri, the land of Kirkhi, the land of Subari (*or Mesopotamia*), and the land of Nireb: and like the god Yem himself I rode thundering over them.

The king who subdued all the regions from the great stream of the Tigris unto the land of Lebanon and the Great Sea; with the land of Laki throughout all its provinces, and the land of Tsukhi as far as the city Rapikhi, and compelled them to fall down at his feet. And who seized with his hand the region from the source of the river Supnat unto the land of Urardi (*Armenia*).

All the region from the entrance of the land of Kirruri unto the land of Kirzan; and from the great stream of the lower Zab as far as the fortress of Til-bahari which protects the city of Zakim; and from the fortress of Aptan unto the fortress of Zabdan, along with the cities of Khirimu and *Birrutu* (?) which is a fortified city of the land of Karduniash (*Babylonia*), I restored once more to my country's rule. All the region from the entrance of the land of Babiti, as far as the city of Khasmar, I distributed among the men of my own land.

Over the regions which I had conquered I placed my lieutenants, and they did homage to me.

Ashurakhbal the glorious Ruler, the friend (*or favourite*) of the great gods. The Sun of great splendour, the conqueror of cities and lands with all their people; the king of kings, the chastiser of heretics; the scourge of those who worship not the sacrifices; the great smiter of the disobedient; the destroyer of rulers who reject my royalty, and of heretics and rebellious men.

[*Here a line is repeated, probably by the mistake of the sculptor; namely, the whole of the preceding paragraph, from "the Sun" down to "rebellious men."*]

The king whose name caused lands and seas to tremble; and who enrolled in the federation of his empire glorious foreign kings, from the rising of the sun unto the setting of the sun, every one of them.

The former city of Calah, which Divanurish king of Assyria, one of the kings who reigned before me, had built, that city had fallen into ruins.

That city I built again. I peopled it with the captives I had taken in the various lands which I had conquered:—the land of Tsukhi; the land of Lakhi; through all its provinces; the city of Tsirku which is placed at the great passage of the river Euphrates: the land of Zamia throughout its whole extent: the land of Bit-Adini, and the land of Syria; together with the people of Lubarna king of the Patinœans whom I had carried off.

I pulled down its old citadel, and I built it new, as far as the surface of the waters (*in its moat?*). One hundred and twenty spans of the lower part I built in fine masonry.

Within the circuit of this fortress I constructed a palace (*or fine house*) of cedar; a house of cypress wood; a house of *taprani* wood; a house of *ku* wood; a house of *meshkani* wood; a house of terebinth wood, and of *tarpikhi* wood, for the residence of my Majesty, and for a remembrance of my reign for evermore.

I made sculptures of the animals of the lands and seas, carved in *pari* stone and in *paruti* stone (*white alabaster?*) and I set them up at the doors of my palace.

I made it grand; I made it splendid; and with images of bright copper I adorned it.

Columns of cedar wood, cypress wood, *taprani* wood, and *meshkanni* wood, I erected at its gates: and the stores of silver and gold; of lead, copper, and iron, captured by my hand in the lands which I had conquered, which I had seized in vast quantities, I treasured up within it.

MONDAY, 8th May 1865.

JOSEPH ROBERTSON, Esq., Vice-President, in the Chair.

The following gentlemen were balloted for and elected Corresponding Members of the Society:—

DAVID MILLER, Esq., Arbroath.

JAMES NICHOLSON, Esq., Kirkeudbright.

The Donations to the Museum and the Library were as follows, and thanks were voted to the Donors:—

(1.) By Colonel J. FORBES LESLIE, F.S.A. Scot.

Necklace of Jet, consisting of thirteen oblong Beads, measuring from $\frac{1}{2}$ inch to 1 inch in length; eight flat, somewhat square-shaped pieces, measuring 1 inch to $1\frac{1}{2}$ inch in length, and from $1\frac{1}{4}$ inch to $1\frac{5}{8}$ inch in breadth; three portions are triangular in form, and measure from $1\frac{1}{2}$ inch to $2\frac{1}{4}$ inches in length. These flat portions are all pierced with three holes lengthwise, and are of the uniform thickness of $\frac{1}{4}$ of an inch;

Two small Amber Beads; small portion of bronze; portions of charcoal;

Fragments of an urn of reddish clay, with an incised ornament of small lines arranged in rows; and portions of human bones, which appear to have been burnt. All found in a cist or coffin at Rothie, Aberdeenshire. (See Communication by Mr STUART, page 217.)

(2.) By Admiral Sir ALEXANDER MILNE, K.C.B.

Roman Amphora or Jar, of coarse yellow-coloured clay, measuring 7 inches in height, and 3 inches across the mouth. The under portion is globe-shaped, and is 7 inches in diameter; the diameter across the bottom being $3\frac{1}{2}$ inches; and there is a handle on each side of the neck. It was found at a depth of 7 feet from the surface.

Eight fragments of small Jars of coarse clay.

Three portions of Mortaria, of coarse red clay: one of them stamped with an ornament or potter's mark—a branch with leaves. Bones of animals, including deer, ox, &c. These remains were all found at Inveresk, near Musselburgh.

At Inveresk the remains of a Roman villa were found (as described in the "*Archæologia Scotica*," vol. ii. p. 159) in digging a trench for a new churchyard wall, in a field situated to the west of the present churchyard, which is on the highest part of elevated ground.

(3.) By Sir ALEXANDER CAMPBELL, Bart., F.S.A. Scot.

Bronzed Winged Celt, 4 inches in length, and $2\frac{1}{2}$ across the cutting edge, turned up by the plough many years ago, on the farm of Achinroer, on the estate of Barcaldine, Argyleshire.

Pair of Brass Snuffers; the top part is ornamented with a lion's head

in high relief, behind it a head winged, and an imitation Roman coin. A human figure forms the centre of each handle.

Plate of Brass, measuring 6 inches in length by $2\frac{1}{2}$ inches in breadth, being the sinister half of a shield bearing the arms of England (three lions passant gardant) within a bordure semie fleurs-de-lis. These were probably the arms of John of Eltham, second son of Edward II., created Earl of Cornwall 1328, died 1334; and this brass has probably ornamented some of his residences, or perhaps the canopy of the monument and effigy erected to his memory in Westminster Abbey. The shield there, on the arm of the knight, has the same blazon, with the slight difference, however, of the bordure bearing the fleur de lis and not semie; but this may be an error of the artist. (See Nichol's "Sepulchral Monuments of Great Britain," vol. i. part ii. p. 95.)

Quaich, or Drinking Cup, measuring 3 inches in diameter, formed of ebony and white wood, bound with two silver hoops on the sides, and one round the bottom. The Cup has a handle projecting from each side. It is stated by the donor to have been made by Archibald Marquess of Argyle just before his execution, and it has been handed down as an heirloom in his family.

(4.) By Mr THOMAS BRYCE, Dykehead, West Calder.

Wooden Spindle, 10 inches long, with stone whorl 2 inches in diameter, being a distaff used by the mother of the donor.

Iron Caltrop, with four prongs, each measuring $1\frac{1}{2}$ inch in length, found in the parish of West Calder.

Dutch Tobacco Box, oval-shaped, $4\frac{1}{2}$ inches long by $2\frac{1}{2}$ broad. On the top and bottom are engraved figures and an inscription.

(5.) By Sir WILLIAM JARDINE, of Applegarth, Bart., F.S.A. Scot.

Section of a portion of a Scots Fir, found standing erect, as if growing, on the subsoil of Lochar Moss, at the depth of 14 feet under the peat.

(6.) By D. COTTIER, Esq., 24 George Street.

Portions of Painted Glass from Lincoln Cathedral. Two portions show parts of the human face, &c.; another portion an arm and hand. The colours are various shades of yellow and dark-brown.

(7.) By General PATRICK YULE, R.E., F.S.A. Scot.

Portrait of Flora Macdonald, oval-shaped, measuring $5\frac{1}{2}$ inches by $4\frac{1}{2}$ inches, photographed from a drawing which belonged to the late Colonel Munro, 16th Regiment of Foot.

(8.) By JOHN NICHOLSON, publisher, Kirkcudbright.

Ball of Oak, 7 inches in diameter, and seven pins of oak, each measuring 13 inches in length, and 3 inches in diameter at the lower end, from which it tapers towards the ball-shaped top, which is $1\frac{1}{2}$ inch in diameter. They were found in a moss in the parish of Balmaclellan, Galloway, 12 feet under the surface. Part of the pins were standing, and part thrown down, as if they had been suddenly left in the middle of an unfinished game.

(9.) By HUGH J. C. BEAVEN, Esq. (the Editor).

The Plurality of the Human Race, by George Pouchet, translated and edited by the donor. 8vo. London, 1864.

(10.) By Madame RAFN.

Notices of the Life and Writings of C. C. Rafn (pp. 20). 8vo. Copenhagen, 1864.

(11.) By A. OSWALD BRODIE, Esq., C.C.S.

Collection of 100 specimens of Paper Money issued by the British Colonies and United States in America from 1758 to 1786, as follows:—

Albany, City and County—Five Shillings,	1775
Connecticut Colony—Forty Shillings,	1775
Maryland State—Six Dollars,	1774
Four Dollars, equal to 27 shillings sterling, 1767-1776	
One Dollar,	1770
Half-Dollar,	1767
Newcastle, Counties of Kent and Sussex-on-Delaware—	
Twenty Shillings,	1759
Twenty Shillings, 1760, printed by B. Franklin and B. Hall.	
New Jersey Colony—Six Pounds, or 17 oz. 10 dwt. of plate, 1762-1764	
Three Pounds,	1758
Six Shillings,	1786

New Jersey Colony—Three Shillings,	1786
One Shilling and Sixpence,	1776
One Shilling,	1776
New York Colony—Ten Pounds, or 200 Shillings,	1771
One Pound,	1771
(Water Works) Eight Shillings,	1775
Six Shillings,	1786
Five Shillings,	1788
(Water Works) Four Shillings,	1775
Two Shillings and Eightpence,	1776
One Shilling,	1776
Ten Dollars (Spanish milled),	1776
Five Dollars,	1776
Three Dollars,	1775-1776
Two Dollars,	1776
One Dollar,	1776
Two-thirds of Dollar, or Five Shillings and	
Fourpence currency,	1776
Half Dollar, or Four Shillings,	1776
One-third of Dollar, or Two Shillings and	
Eightpence,	1776
Quarter Dollar, or Two Shillings,	1776
Sixth of Dollar, or One Shilling and Four-	
pence,	1776
Eighth of Dollar, or One Shilling,	1776
Pennsylvania Province—Fifty Shillings,	1773
Twenty Shillings,	1759-1764-1773
Ten Shillings,	1760-1771
Six Shillings,	1773
Two Shillings and Sixpence,	1772
Eighteenpence,	1774
Ninepence,	1781
Rhode Island Colony—Ninepence,	1776
Philadelphia, United Colonies—Sixty Dollars (Spanish milled),	1778
Fifty Dollars,	1778
Forty Dollars,	1778

Philadelphia, United Colonies—Thirty Dollars,	.	.	.	1778
Twenty Dollars,	.	.	.	1778
Eight Dollars,	.	.	.	1776
Seven Dollars,	.	.	.	1776
Six Dollars,	.	.	.	1775
Five Dollars,	.	.	.	1776
Four Dollars,	.	.	.	1776
Three Dollars,	.	.	.	1776
Two Dollars,	.	.	.	1776
One Dollar,	.	.	.	1775
Third of Dollar,	.	.	.	1776
Sixth of Dollar,	.	.	.	1776
United States—Twenty Dollars,	.	.	.	1780
Two Dollars,	.	.	.	1780
One Dollar,	.	.	.	1780

As specimens of early American paper money are not common, descriptions of a bill of the British colonies, and another of the United States, are annexed :—The “Bills” are printed on thin, coarse card-board, and measure $3\frac{1}{2}$ inches in length by 3 inches in breadth.

One for twenty shillings has the words **TWENTY SHILLINGS** on the four sides of the border, which is formed by a base supporting two pillars and an architrave, and is printed as follows :—

“This Bill shall pass current for Twenty Shillings within the Province of Pennsylvania, according to an Act of Assembly made in the fourth year of the reign of King George III. Dated the 18th day of June 1764. Twenty Shillings;” and in addition, the Royal Arms of Great Britain, and three signatures.

On the back is a border formed by ornamental types. At the top, between two crowns, “To counterfeit is death.” The centre is filled up by a woodcut, representing two leaves, and below this, “Printed by B. Franklin and D. Hall, 1764.”

The other of the United States :—

“This Bill entitles the bearer to receive Forty Spanish milled Dollars, or the value thereof in gold or silver, according to a resolution passed by Congress at Philadelphia, Sept. 26, 1778.” It is ornamented by a

woodcut border, having on each side the words, "Continental Currency Forty Dollars," and at the top and bottom "The United States." These Bills are generally ornamented with emblematical devices, rudely cut on wood, but in varied forms and patterns; on the back is an ornamental type border, with a woodcut in the centre displaying a stalk with leaves, at the top "Forty Dollars," and at the bottom the printer's name and the date, "Printed by Hall and Sellers 1778."

(12.) By Sir CHARLES LYELL, Bart., through JOHN EVANS, Esq., London.

Specimens of worked Flints, collected in the neighbourhood of Jubbulpore in Central India, by the late Lieutenant Swiney.

(13.) By JOHN EVANS, Esq. (the Author).

On the Forging of Antiquities (pp. 12). 8vo. Lond. 1865.

(14.) Purchased from Mrs WATT, Townhead, Kintore, Aberdeenshire.

Two Arrow-heads of light-coloured flint, with barbs and stem; measuring $1\frac{3}{4}$ inches in length. One leaf-shaped Arrow-head of reddish-coloured flint, 1 inch in length. All found on the moor between Kintore and the old castle of Hall-forest.

One leaf-shaped Arrow-head of yellowish-coloured flint, measuring $2\frac{1}{2}$ inches in length; and one with barbs and stem, of greyish-coloured flint, $1\frac{1}{8}$ inch in length. Found many years ago on the farm of Wardes, Kintore, Aberdeenshire.

Two Arrow-heads, the one of grey, the other of yellow-coloured flint, measuring from 1 inch to 2 inches in length, with barbs and stem. Found near Kintore.

Semicircular Disc of dark-grey-coloured flint, measuring 3 inches in diameter, the circumference ground to a fine cutting edge; it was probably used as a knife.

Three Whorls or Buttons of stone, with a perforation in the centre, measuring $1\frac{3}{4}$ inch to 2 inches in diameter. One is ornamented by incised diagonal lines, and was found in a garden at Townhead, Kintore.

Circular Disc of quartz, measuring 3 inches in diameter by 1 inch in thickness; the edges are blunt, and appear worn as if by use.

Three Celts of greyish-coloured stone, measuring from $7\frac{1}{2}$ inches to

5½ inches in length, and from 2 inches to 3 inches across the cutting face. Found near Kintore.

Water-worn Nodule of Sandstone, measuring 5 inches in length, and 2 inches in diameter, tapering from the centre to the round-shaped extremities. In the centre is cut a groove $\frac{7}{8}$ inch in width and $\frac{1}{2}$ inch in depth. Probably a sinker for a net or line.

Mould for casting Bronze Celts, formed of a piece of sandstone, 9 inches in length, 5 inches in breadth, and 2 in thickness. One of the cavities cut for the Celts measures 6½ inches in length, and 4 inches across the cutting edge; the other measures 3¼ inches in length, 1½ inch across the cutting face, and $\frac{3}{4}$ inch across the upper extremity. It was found on the Borough-Moor, Kintore.

Bronze Celt, measuring 5 inches in length, and 3 inches across the face; found near Kintore.

Sculptured Slab of dark-coloured granite of irregular shape, measuring 3 feet 6 inches in height, 3 feet in greatest width, and 9 inches in thickness; on its face is incised the so-called symbol of the Two Crescents, turned back to back, they measure 16 inches between the points, the spaces between the outlines being ornamented with semi-circles and an implement like a fork with four prongs; a portion of the stone at the upper part appears to have been broken off.

Sculptured Slab of reddish-coloured granite, measuring 5 feet 2 inches in height, by 3 feet in width, and 5 inches thick; on one side, at the upper part, is cut the symbol of the "Elephant," under which is the "Spectacle" and "zigzag or Z" ornaments, with foliated ends; on the other side is the "Elephant" and "Mirror" inverted.

These two stones were found embedded in the "Castle-hill," a mound near the church of Kintore, recently removed by railway operations, which was about 30 feet in height by 150 feet in diameter; they are described and figured in Mr Stuart's book of "The Sculptured Stones of Scotland," page 33, and plates ex. and exi.

Iron Padlock or Fetterlock, consisting of a tube 3½ inches long by 2 inches in diameter; at one end is a staple to which is attached a semi-circular hasp, the other end of the hasp passes into the tube and is locked by a spring inside; its key measures 5½ inches in length and has a Gothic bow, at its lower end is a pipe with wings, which being in-

serted into the large tube releases the spring. From the Old Kirk of Kintore.

Iron Padlock measuring $7\frac{1}{2}$ inches square; the key-hole is covered with a lid and hinge; and the hasp is of a semi-circular form, and passes through the box, being held by the wards inside. It is opened by a key 4 inches in length, with a plain bore; and an iron point which requires to be pressed on a spring at the side. From the old castle of Hall Forest, Kintore, Aberdeenshire.

There were exhibited—

(1.) By the Right Honourable Lord GRAY and Sir P. M. THREIPLAND, Bart., through Andrew Jervise, Esq., Corr. Mem. S.A. Scot.

A broken portion of Earthenware Pottery, Bone Pins, Bronze Rings, portion of Human Skull, &c. &c.; found at Hurley Hawkin, near Dundee, as detailed in a Communication by Mr Jervise (see below).

(2.) By JOHN M. BALFOUR, Esq., W.S., F.S.A. Scot.

Bronze Sword, and bronze point of a Scabbard, Gold Ring, and Bronze Brooch; found in digging in the parish of Corstorphine, Mid-Lothian.¹

The following Communications were read :—

I.

ACCOUNT OF EXCAVATIONS AT HURLEY HAWKIN. BY ANDREW JERVISE, Esq., BRECHIN, CORR. MEM. S.A. SCOT. (PLATE XV.)

All our historians agree that Alexander I., King of Scotland, had a palace or residence at or near Invergowrie. Local tradition affirms that it stood upon a sort of peninsula, formed between two considerable burns, about a hundred yards west of the Parish Church of Liff, and within the woods of Gray. The spot, which is from one to two miles north of the Tay and the old church of Invergowrie, is about three hundred feet above the level of the river. It is known as Hurley Hawkin, a name which suggests an affinity to that of the hill of "Hurly

¹ These articles were afterwards presented to the Museum, and are described in a subsequent part of the volume.

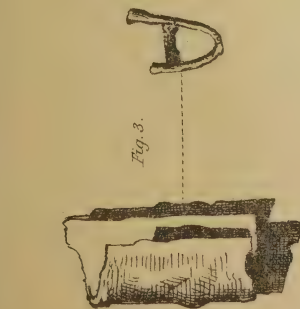


Fig. 3.

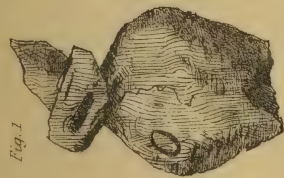


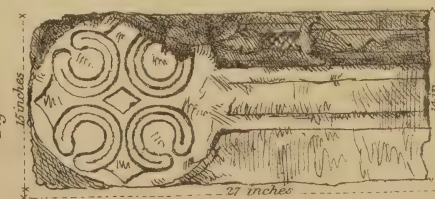
Fig. 2.



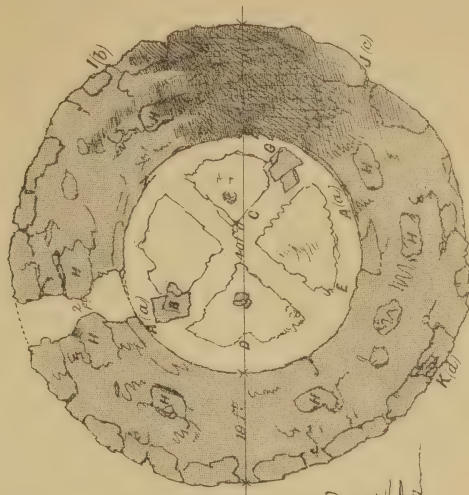
RELICS FOUND WITHIN THE AREA OF THE BUILDING. (TRUE SIZE)



Fig. 4.



IN BURIAL GROUND, LOGIE
DUNDEE.



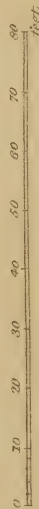
PLAN OF RUINS AT HURLEY HAWKIN, LIFE.



(b)



(a)



Hackit" at Stirling, which is popularly believed to have originated from its having been the scene of a childish diversion of that name, thus celebrated by Sir David Lyndsay, in speaking of the amusements of the Prince, afterwards James V. :—

" Ilk man efter thair qualitie,
 Thay did solist his Maiestie.
 Sum gart him rauell at the racket.
 Sum hurlit him to the *hurlie-hakket*."

It would appear that the sport of "hurlie-hakket" consisted in sliding down a slope or precipice;¹ and as Hurley Hawkin slopes rapidly towards the south, and is otherwise well suited for such an amusement, possibly the name had originated from much the same cause as that ascribed to Hurly Hackit. Doubtless the sport or pastime had been known to, and practised in old times by, the young people of Liff, the kirktown of which, centuries ago, appears to have been pretty populous.²

It is several years since I first noticed the artificial appearance of Hurley Hawkin; and it then struck me to have been dug about at some previous time. On looking into the old Statistical Account, I found my surmises were verified, for it is there stated that, "In digging about the remains burnt ashes were found, and an iron spur of the kind long ago worn."³ Thinking that the search had been efficiently made, and possibly under the eye of the Rev. Dr Playfair of Meigle, I thought nothing more of it until some years afterwards, when I was told that Lord Gray's forester had found some pieces of bones, also rings of bronze and iron. Supposing that further traces of the old occupiers of the place might yet remain among the rubbish, and that something of the form and construction of the building might also be ascertained, I made application to Lord Gray, upon whose property it is situated, to allow me to have the place investigated. To this his lordship not only at once acceded, but in the most courteous manner instructed his factor, the late Mr H. J. Bell, to place several labourers at my disposal. And now that Mr Bell is unfortunately no more, it is only due to the memory of that gentleman to say that he not only took a deep interest in the excavations, but did everything in his power to facilitate operations, in

¹ Jamieson's Scottish Dict. *in voce*.

² Liber Eccl. de Seon, App. *passim*.

³ Vol. xiii. p. 116

which able and valuable assistance was also rendered by Mr Gray, the forester, and a son of the latter.

The excavations were carried on over two days in the month of March last, and trenches of from two to three feet in width were made (see plan of ruin, Plate XV. fig. 1), every spadeful of earth and the whole area being carefully examined. The area of the building presented a circle of about 40 feet in diameter; and the floor, at the depth of about $3\frac{1}{2}$ feet, was paved with unshapely flags. The wall (A) was constructed as shown upon the plan at (a), and built of grey freestone, of which there are old quarries in the very vicinity.

At the point (B), about $1\frac{1}{2}$ foot below the surface, a flat stone projected, under which were scattered remains of a human skeleton, lying upon a lower flag, the latter of which rested upon the floor. On removing the bones and mould, a deposit of charcoal was found on the south and west sides, among which were several bronze cup-shaped relics, formed somewhat like, and about the size of, small brass-headed nails. Only one of these was got entire, but the stalk of it was so much corroded that it soon crumbled down. Its appearance, in a perfect state, is shown in Plate XV. fig. 2. Of the use of these tiny articles I can form no conjecture, not having before met with anything like them. Possibly they had been used as buttons, or fasteners, for a jacket or some other part of female attire, of which the fragment of grooved metal with the pin (upon the latter of which they may have been hooked), had possibly formed a portion (fig. 3). Flat bits of metal were got in the same place; and here, too, but not so deeply embedded in the soil, or rather rubbish, were found most of the articles above alluded to, which I saw in the hands of the forester.

Boars' tusks and a tooth of some other animal of the chase, as well as a piece of corroded iron, and an unbored whorl, were found in different parts of the trenches, mostly upon the north-east side. Charcoal and burnt barley were got in considerable quantities throughout the area, as well as bits of cockle and mussel shells; and near to (C), among a quantity of ashes, lay a small piece of wood with rude carvings upon it (fig. 1). It appears to have suffered from fire. There were also traces of human bones at (D) and (E), mixed with what appeared to be "sheep shanks." Another deposit, wholly of animal bones, was at (F); but the largest de-

posit was at (G), among which were shoulder and leg bones, more or less decayed, and parts of the skull and the lower jaw of a horse. The jaw was almost entire, with most of the teeth pretty fresh. These remains were huddled together below two or three large-sized flags, and had all the appearance of having been previously disturbed.

In consequence of the rubbish in the area of the circle having been turned over at a former period, no satisfactory account can be given of the true disposition of the human or animal bones, nor the relation which the bronze or other relics bore to either, points very much to be regretted, but which must continue to be the case so long as indiscriminate investigations are carried on, and no note taken of the peculiarities of the construction of such places, or of the relics found in them. This, it is to be feared, is not unfrequently the case even now, some *diggers* having more in view the wish of being considered learned in the now somewhat fashionable study of antiquities, than of enriching either the treasures of our National Museum or the records of the Society.

So little remains even of the walls of the reputed palace of Invergowrie, that we are left much in doubt as to their plan or construction. That the building was of a circular form, and, as far as can now be seen, built of *dry* or uncemented stones,—the larger or boulder-sized being used in the outer part of the wall, and distributed through the middle or heart of the building, as shown at the parts marked (H) upon the plan, mixed throughout with mould and landstones of various sizes, and that this wall, as now seen, was of the enormous thickness of from 19 to 20 feet,—is almost all that can be said of the building with certainty. It will be seen that the courses had been pretty regularly laid (*a*); and the disposition of a few of the remaining stones of the outer wall at (I), (J), and (K), is given at (*b*), (*c*), and (*d*), respectively. The burns or rivulets which run on each side of the mound upon which the ruins are situated, join at a point from 60 to 80 feet south of the outer wall, and about 60 feet below its height. Upon the north is a foss or ditch, apparently artificial: the ditch is from 6 to 10 feet in depth, by from 20 to 40 feet in breadth.

It were vain to conjecture, in the sadly dilapidated state of Hurley Hawkin, whether it had been of a similar construction to the remarkable “burgh” of Mousa, in Shetland, of which we have excellent drawings

and descriptions—the first by Sir Henry Dryden, the latter by Mr Stuart.¹ Possibly the remaining traces favour such a notion; if so, I am not aware that a “burgh” of so large dimensions, and of such a thickness of wall, has been found in any other part of Scotland.

Whether tradition is right in setting down the site of Hurley Hawkin as that of the palace of Alexander I. at Invergowrie, may possibly be questioned; and the common tradition that a female died of the plague and was buried within the area of the building, forms no clue to its origin. So far as I am aware, no other foundations have been got in the neighbourhood to warrant the existence of a castle in remote times; nor is there any other place with which the name of Alexander is associated. Yet, I cannot help thinking (unless this building had been intended merely as a temporary residence) but it belongs to an earlier period, from the fact of its being in such a primitive kind of architecture, and so very inferior to that which was common in buildings of note long before the time of Alexander I.

However this may be, it is certain that the earliest records concerning the district invariably connect the name of Alexander I. with Invergowrie and Liff. Fordun states that the lands of both places were given to that king as a baptismal gift by his godfather, the Earl of Gowrie, and that when Alexander succeeded to the throne he built a royal palace at Liff (“apud Lyff regale cœpit ædificare palatium”), in which he was soon after assailed by a band of rebel subjects; and that, in commemoration of his victory over them, he founded the Abbey of Scone.² Wyntoun, in confirming the story of this affray, as well as the foundation at Scone, says, in regard to the king’s residence and possessions here:—

“ In Invergowry a Sesowne,
Wyth an honest Curt he bade,
For thare a Maner plas he hade,
And all the land lyand by
Wes hys Demayne than halyly.³

We also know that Alexander’s grants to the monks of Scone included the churches of Invergowrie and Liff, together with lands in each of those places,⁴ and that the church and lands of Logyn Dundho (Logie-

¹ Proceedings of Society of Antiquaries, vol. iii. pp. 187–95. Plates IX. XXIII.

² Fordun, lib. v. c. 36. ³ Cronykil, vol. i. p. 288. ⁴ Liber Eccl. de Scon, p. 2.

Dundee), which have been ecclesiastically attached to Liff for many years, were given to the same convent by Richard, Bishop of St Andrews.¹

I have not been successful in my inquiries as to the names of the patron saints either of Liff or of Logie-Dundee; and, barring the remains of a pretty large and rather rudely-shaped font, and an enigmatical inscription upon a tombstone (erected in memory of an Agnes Gray, who died in 1707, aged 62 years), there is little of general interest in the burial-ground at Liff. The epitaph is curious, and may be quoted:—

“ With husbands tuo I children
 had eleven ;
With two of odds I lived
 Sixty even ;
My body sleeps in hope,
 My sovl I gave
To him who suffered
 death, the same to save.”

All trace of the church of Logie-Dundee has been removed; and in building a burial-aisle upon its site nearly thirty-five years ago, several carved stones, now lost, were got in the old foundations. The church stood upon a hillock in the hollow between the Law of Dundee and the Hill of Balgay; and the enclosure, or burial-place, which is a large space of ground on the west side of the Dundee and Lochee road, is still used for interment, chiefly by the inhabitants of the latter place. The gravestones are numerous, but none of them old, if we except the fragment of a coffin-slab, 15 inches broad, by 27 inches long, which was found some twenty years ago while digging a grave near the site of the old church (Plate XV. fig. 4). The sexton told me that the remainder of the slab still lies in the ground, and that it was cut by him and a fellow-labourer, owing to its being in their way at the time referred to.

Upon a previous occasion, I communicated notices regarding certain points of antiquarian interest connected with Liff, Invergowrie, and

¹ Liber Eccl. de Seon, p. 26.

Benvie.¹ Since then I have learned that about forty years ago two or three underground chambers or weems were exposed upon the rising ground between the woods of Gray and Camperdown, but that they were ultimately destroyed.² In the hollow to the south-east, upon the farm of Charleston, a stone cist, containing an urn, the latter of which is in fine preservation, was recently found in the course of agricultural operations.

But possibly the most interesting discovery was that of a stone cist and urn at Ninewells, near Invergowrie, on 30th March 1863, upon which day, and within an hour or two from the time it was found, I luckily met with a labourer taking the urn home, or, as he called it



Urn found in a short Cist at Ninewells.

“a cappie,” as a plaything to his “bairns!” This peculiarly-shaped and interesting object was presented to the Society in April 1863, and is now in the National Museum (“Proceedings,” vol. v. p. 81), see the annexed woodcut. The bones found in the cist were supposed to be those of a young female, from 12 to 15 years of age.

As now constituted, Liff consists of four parishes, viz., Liff, Inver-

¹ Proceedings of the Society of Antiquaries of Scotland, vol. ii. pp. 442-5. The “flumen Gobriat in Pictavia,” is an early form of the name of Gowrie.—*Transactions of Royal Irish Academy*, vol. xxiv. p. 163.

² Possibly this is the place referred to in the Old Statistical Account (vol. xiii. p. 119, note †), where there is an interesting notice of a similar chamber near Lundie House (now Camperdown), which is said to have been minutely surveyed by Lord Hailes. Did Lord Hailes give any account of this to the Society at the time?

gowrie, Logie-Dundee, and Benvie. The last-named was joined to Liff in 1758, the others some time before the middle of the seventeenth century.¹ A handbell at the school of Liff is thus inscribed:—"FOR THE PARISHES OF LIFFE ENNERGOURIE AND LOGIE. PAID BY THE POORE, 1718. MR. ALEX^R. SCOTT, MINISTER." Another bell, which belonged to the kirk of Benvie, now at Liff manse, bears these names and date:—"MICHAEL BYRGERHVYS M.F. 1631: M. HENDRIE FITHIE."

II.

NOTICE OF CAIRNS RECENTLY EXAMINED ON THE ESTATE OF ROTHIE. ABERDEENSHIRE. BY JOHN STUART, Esq., Sec. S.A. Scot.

These cairns are on the farm of Blindmill, on the opposite side of the hollow from Burreldales, part of the lands of Darley, on which a cairn stood till recently, and of which a notice was given by Mr Chalmers in the Proceedings of the Antiquaries, vol. iv. p. 429.

Three of them are on a piece of whinny ground, sloping down on the south to a small burn, and they are on a line nearly the same as that of the boundaries of Auchterless and Fyvie, which meet here. One, almost in a line to the south-west of the others on the adjoining farm of Darley, had been opened by the farmer shortly before our arrival, and it was found to contain a large rude urn in the centre, filled with bones. There was no cist, and the urn was merely inserted in a hole in the till.

On 14th September 1864, Colonel Forbes Leslie, the proprietor of the ground, Mr James Hay Chalmers, advocate, and myself, proceeded to open two cairns on Blindmill, lying near to each other, on the brow of the hill. The first was a flat cairn about 32 feet across, surrounded by a ditch. A cist was found in the centre, about 3 feet in length, by 2 feet across, lying north-east by south-west. In the south end burnt bones were observed, but nothing else.

The next was also a flat cairn, about 23 feet across, surrounded by boulders, and, on digging, a cist was found nearly in the centre, and

¹ Old Stat. Acct., vol. xiii. p. 101.

almost east and west, about 3 feet 4 inches in length, and 2 feet 8 inches in breadth, formed of rude flags. The bottom was on the till, and the cover had been removed, so that the cist was filled with mossy debris. An urn was found in pieces on the south side; bones appeared in the east end, and also in the middle in small portions, and beads of a jet necklace were found in the ends of the cist; and also, both beads and bones outside of the cist towards the east. The bones were mostly on the south, and portions of charred wood were found throughout.

On the sloping fields of Burreldales, where the cairn removed by Mr Chalmers stood, many round hillocks of charred stones and black earth-like ashes were till quite recently. They were always near a spring of water. One close to a spring was pointed out to me near the farm-house of Burreldales, and, although in crop, the earth which was turned up was all blackened. The farmer showed a quarry from which great blocks of a hard quartzzy stone are got, and from which, he thinks, the blocks round some of the cairns had been got. Flint arrow-heads used frequently to be found on the brae side, beside the other remains.

Another and larger, but still a flat cairn, in the arable ground below the slopes, was opened. It had been surrounded by a circle of pretty large stones, of which a few remained. No remains were found, except that in the centre, fragments of burned matter and bones, mixed with the sub-soil, were turned up.

III.

NOTICES OF THE LOCALITIES IN A GRANT OF THE LANDS OF KEIG AND MONYMUSK, BY MALCOLM, KING OF SCOTS, TO THE CHURCH OF ST ANDREWS; AND A SKETCH OR HISTORY OF THE PRIORY OF MONYMUSK. BY THE REV. ALEX. LOW, MANSE OF KEIG, ABERDEEN-SHIRE, CORR. MEM. S.A. SCOT.

The bounding charter, published by the Spalding Club, in the view of the diocese of Aberdeen, is a curious and unique document. It is a brief memorandum or bounding charter of the marches of the Episcopal or Church lands of Keig and Monymusk, which were "dedi-

cated to the Church of St Andrews, given to God, and the Church of the blessed Mary at Monymusk, by Malcolm, King of the Scots;” and, moreover, is contained in a more extended and perfect charter, in the register of St Andrews. It was extracted from the register of St Andrews by “Master Walter Bannantyne.” This charter, as published by the Spalding Club,¹ was taken from a paper in the charter-chest at Monymusk, in the handwriting of the sixteenth century, which was collated with an older but less perfect copy in the charter-chest at Whitehaugh. It appears from this charter that these lands of Keig and Monymusk were bestowed upon the church by Malcolm, King of Scotland, that is, as will afterwards appear, by Malcolm III.

The first march mentioned in this document begins at a water or brook, which was designated Toen, so named from a woman of that name who was called Toen, and was drowned in that stream. This small burn has its source in the northern shoulder of the Corennie Hill, and runs through Glen Ton, evidently the same name, eastward to the river Don, bounding the lands of Monymusk, from Cluny. A line from the source of the Ton, proceeding in a north-westerly direction, including a small hill belonging to the Corennie range, reaches the Kolcy, which rises in a wood, nearly a mile west of Tillyfourie Toll-Bar, on the estate of *Ton*-ley, which shows some connection with Toen or Ton from its name. This small stream, designated in the charter the Kolcy, is now known by the name of the Burn of *Ton*-ley, and *Ban*-ley, when it takes a northerly direction, and, like the Koley, at a distance from the source of the Ton of about seven miles, discharges itself into the river Don, being the same, and the only stream running in that direction.

The march then takes the channel of the river Don, in a westerly direction for more than one mile, when it reaches a point where the rivulet Fowlesy runs from the north into the Don, by or through the garden of the mansion-house of Whitehaugh. The Fowlesy rivulet, which, as well as the Kolcy, has now lost its ancient name, is distinctly traced due northward to its source, exactly four miles from the river Don. It is now known by the name of the Camach Burn, which has been a

¹ Collections for a History of the Shires of Aberdeen and Banff. Edited by Joseph Robertson, Esq., in 1846.

little diverted from its original source, near the river Don, in consequence of the improvements at Whitehaugh. Tracing from the Don the Fowlesy, we reach a place called in the charter Coritobrith, a natural corrie, opening up the entrance to the hill, which is interpreted in the charter to signify the fountain of the valley. This fountain, which is the source of the Fowlesy or Camach, rises in a morass on the hill of Brinie, dividing it from Knocksaal to the west of it; and the principal well here is named Saint Tobran's Well, from Tophar, which in Gaelic signifies a spring of water, and hence Coritobrith.

The march then proceeds still northward to Lawchtendaff, at a small distance off, which signifies the place where a certain person was slain, at a point where four roads meet. This locality is easily distinguished, as the event has been handed down by tradition; and the place is known by two roads crossing each other at this point, which is called Littlejohn's Length, where a man was said to have been slain, and most probably bore this name; one of the crags or rocks on the mountain of Benochie is called Littlejohn's Crag or Craig. The march then turns eastward, even to the top of a mountain called Slenemingorne, which signifies the place where the goats feed or lodged. This hill is not known by its ancient name, but is now called the Satur hill.

The march is then traced eastward to standing stones, close by Alba Clanenauch, which is interpreted "the field of sweet milk." There are, eastward from this hill, two points where standing stones are found,—one due north from the other, one and a-half mile, near the summit of the highest part or northern pinnacle of Brinie Hill; and the other, a set of Druidical circles half down the hill, consisting of upright or standing stones.

The first place alluded to consists only of a few standing stones, about two miles east of the hill of Slenemingorne, the goats' hill, and one and a-half mile due north of the circles. These consist of five or six stones, one or two of which are found in an erect posture, and three or four inclined or lying on the ground. From these stones, which are held as march-stones to a small property reaching across the Brinie Hill on both sides, there is a hill-road or unmade track, which winds south-eastward by the summit of the irregular hill, to a road which ascends to the top of the mountain of Benochie. By this track may be meant, in

the charter, "by *the way*,¹ even to the top of the hill which is situated between Kege and Garuiauch," this being the highest southern peak of the Brinie. This would be a natural enough division of the hill which separates Keig from Garioch, mentioned in the charter, now known by the name of Brinie Hill, which is situated between the two districts.

The access from the Druidical circles, the other point, although not by a road or track to the top of the mountain (that is, a part of the Brinie Hill), "which lies between Keig and Garioch," is equally direct, and much nearer the second set of standing stones or Druidical circles mentioned, being situated at the foot of the hill, to which both lines lead.

The second point, said to be near Alba Clanenauch, consists of not less than five circles of upright stones, with a causeway leading to an altar stone in the centre, or sacrificial stone, erected on the side of a table-land, which was covered with heath about thirty years ago, but is now cultivated land. Some of these circles would have been from forty to fifty feet in diameter, others somewhat less; and the causeway was probably about twelve feet wide, and of a considerable length. The height of the upright rude stones, of a quadrangular shape, was about four or five feet above the ground, at a distance of about nine feet from each other in the circle, which contained in some cases from fifteen to eighteen stones in number. It was, in short, one of the most complete set of circles which the writer had ever seen, who has been thus particular in describing them, as every one of these stones has fallen under the hand of the labourer, in the progress of modern improvement, and been removed for the purposes of building. Nothing now remains to be seen of these Druidical places of worship but one upright stone, about six feet in height above ground, which was placed in a more perpendicular position, and marked as a memorial stone, on the accession of George IV. to the throne. There are also one or two more, of less height and dimensions, still remaining to mark this place of antiquity, which existed before the Christian era. These few remains of bygone centuries are now enclosed in a small circular plantation of wood for preservation.

I will now consider the evidence for this other set of standing stones,

¹ "Per viam."

which may be those meant in the charter, which divides the hill of Brinie, lying between Keig and Garioch. They are situated about half-way down the hill, which separates these lands from each other, and at the foot of the pinnacle or conical hill, a part of the Brinie range, from which the march proceeds to Benochie or Benychie. The place known by the name of Alba Clanenauch, described in the charter as the plain of sweet milk, a name not known in modern times in this district, near which the march passed, might in some measure be descriptive of this locality, rather than the other; and, on the whole, the evidence rather points to this place, as Alba Clanenauch.

This line of march proceeds "by the way" to the top of the hill or southern eminence of the Brinie range, dividing the hill into two parts, one of which belonged to Garioch, and the other to Keig and Monymusk. From the top of this hill the boundary line stretches eastward to Littlejohn's Crag, and from thence to the Watch Crag, the Oxen Crag, and onward through the centre of the highest part to the Methertap, or most eastern point of the mountain of "Benychie," dividing it into two parts, the northern division of the mountain belonging to the Garioch, and the southern to Keig and Monymusk.

From Benochie the march is traced by a rivulet to Alde-clothi, which signifies the rocky burn; and from this place, turning to the right, it reaches Brecachath or Breca, the modern name, a word which is interpreted "the speckled plain." In the descent from Benochie Hill, the bounding line passes through part of the parish of Oyne, which part lies to the west of it, and is included within the boundary of these churchlands. From Breca, the name of a property south-east of Benochie, the boundary reaches to the water which is called Vreewy, and from thence by this stream, which pursues its course to Cosalde. From this rivulet the boundary line winds its course to the highest part of the wood of Trenechinen, which signifies a very extensive forest, probably Whitehill, an ancient wood now cut down, the highest part of which forms the boundary between the properties of Monymusk and Fetternear, in the parish of Chapel of Garioch. The march now proceeds southward for about two miles, to a fountain which flows, after diffusing itself in the low grounds around, into a rivulet or rill, which is called Doeli, and means burning coal, on account of its blackness. This is evidently the

moss of Monymusk and Fetternear, a place full of springs and stagnant water, from whence a small stream or rill takes its rise, and runs into the River Don, considerably south of the House of Fetternear, as the Doeli is said to do. What name this rill bears, if any name, I know not. From the Don, which, for a small distance, forms the boundary, this march turns southward till it reaches the first march, southward of the river, through Glen Toen or Ton, mentioned in this memorandum or bounding charter.

These lands appear at first to have been in possession of the Crown, when Malcolm III., King of Scotland, was on a visit at Monymusk, having proceeded to the northern parts of the kingdom in consequence of a rebellion which had broken out in the province of Moray. He was assisted by the inhabitants of Ross, Caithness, and the northern parts of the kingdom, against the rebels, who committed heirschips and slaughters such as were unheard of in these parts. Macduff was sent with an army from Mar to repress them; but his progress seems to have been put a stop to by bribery, the influence of money, and his unscrupulous proceedings. The King, hearing that not only the northern parts of the kingdom, but the isles had united together against him, slaying his servants and the ministers of justice, demanded of his treasurer if any lands in these parts belonged to the Crown. He was informed in answer, that the lands of Monymusk, on the River Don, afterwards made a barony, belonged to the Crown. He then made a vow that they should be dedicated to St Andrew, the patron saint of Scotland, if he would aid him in putting down the rebellion, and intercede with God for him, according to the superstitious views of the times.¹ He overran the district, subdued the enemies of his Crown; and these lands were, by charter, conferred about 1080 upon the Culdee Church at Monymusk, by King Malcolm, now comprising the parishes of Keig and Monymusk, and a part of the parishes of Oyne, Chapel of Garioch, and Cluny.² The extent of these lands is

¹ Bellenden's Croniklis of Scot. b. xii. ch. xi. vol. ii. p. 283.

² *Marchie terrarum Episcopatum de Kege et Monymusk concessarum ecclesie Sancti Andree per Malcolmum Regem scotorum prout in carta desuper confecta latius continetur. Extractum ex Registro Sancti Andree per Magistrum Walterum Bannantyn.* From a paper in the charter chest at Monymusk, in the handwriting of the sixteenth century, collated with an older but less perfect copy, in the charter

considerable, and they are mostly composed of cultivated ground, unless the half of Benychie, which is incapable of cultivation, but is now, for the most part, planted with trees, and will form a large forest. The united properties represent a quadrilateral figure, the northern boundary being about fourteen miles in length, bending a little towards the south near the east end, the southern line being almost a parallel to it, and about ten miles in length. The east line extends about eleven miles, but is more irregular in its course, and bends due eastward to a point, where it meets the River Don, near Kemnay Manse. The west line, forming a right angle with the northern boundary, measures about twelve miles, and describes a tongue with the south line on Corennie Hill, at the south-west corner of the quadrangle, the contents of the whole figure being about one hundred and thirty-eight square miles, and the circumference upwards of forty-seven miles. It is intersected by the River Don, which divides it nearly into two equal parts, entering considerably north of the middle of the west boundary, and issuing at the south-east corner of this quadrilateral figure.

These lands appear to have been the property of the Culdean Scottish Church, on which a priory was founded by King Malcolm III., at the same time that he granted them to the Church. The priory consisted of one oratory for public worship, where the people assembled to offer their devotion to God; one dining-room, for purposes of hospitality; and one dortor or dormitory, where the Culdees took their rest; but no cemetery for burial. It was also endowed still further by Robert, Bishop of St Andrews, who lived between 1138 and 1153; by Roger Earl of Buchan, before 1179;¹ by Gilcrist Earl of Marr, who bestowed upon it the churches of Loychel, Ruthauen, and Inuernochin or Strathdon, between 1199 and

chest at Whitehaugh—*Etsunt istæ Marchie quas reliquit Malcolmus Rex propter victoriam ei concessam Deo et ecclesie Beate Marie de Monymusk, dans benedictionem Dei et Sancte Marie omnibus juro ipsius ecclesie seruantibus.* Collections for a History of the Shires of Aberdeen and Banff, 1843. Edited by Joseph Robertson, Esq., for the Spalding Club.

¹ Carta Rogeri Comitis du Bouchan de grano et caseo de Foedarg, etc. (forte ante A.D. 1179). ‡ Keledeis de Munimusc. Boetius in *Malcolmum tertium* (f. 2586; Buchan rerum Scot. Hist. lib. 27, c. 20.—*Archbishop Spottiswood's "History of the Church of Scotland."* Lond. 1672, fol.

1207.¹ These possessions, bestowed by Gilcrist Earl of Marr, and the churches of Saint Andrew de Afford, Saint Diaconianus de Kege, Saint Marnoc de Loychel, and Saint Mary de Nemoth, and all the lands, tithes, and pertinents belonging to them, were confirmed by the Pope Innocent, between 1198 and 1216.² By another deed of Pope Innocent, the churches of Saint Andrew de Afford, Saint Marnoc de Loychel, Saint Diaconianus de Kege, and Saint Andrew de Kindrocht, were confirmed in the year 1245 to the Priory and Convent of Monymusk.³

This priory consisted at first of Culdees, of which the Church of Scotland was then composed.⁴ But when the Romish Church began to grasp at universal dominion, and was desirous of subjecting every Christian Church to their rule and forms, a convention was held for this purpose, in consequence of letters from Pope Innocent, between Brice, Prior of the Culdees, and William, Bishop of St Andrews, in the year 1211. The twelve Culdees with their prior, of which the priory seems to have now consisted, were taken bound to present a leet of three, chosen by the convention, to the Bishop of St Andrews, out of which he was to make choice of one, whom he nominated Prior or Master of the Culdees, with power to exercise his authority over them, but not to alter the order of Monks or Canons without the consent of the Bishop of St Andrews.⁵ This Culdean oratory was to have no churchyard, the bodies of such as belonged to it were to be buried in the churchyard of the parish church of Mony-

¹ Carta Johannis Aberdonensis Ecclesie ministri Canonicis de Munimusc de ecclesiis de Loychel.—*Ruthauen et Inuernochin Liber cartarum. Prioratus S. Andree*, pp. 374, 375, inter A.D., 1199, et A.D. 1207.

² Litera Domine Pape Innocencii. *Ibid.* pp. 375, 376, inter A.D. 1198 et A.D. 1216. Confirmatio Innocencii Pape Priori et Conuentui di Munimusc, &c., (A.D. 1245.)

³ Confirmatio Innocencii Pape Priori et Conuentui de Munimusc de ecclesiis Sancti Andree de Afford Sancti Marnoci de Loychel Sancti Diaconiani de Kege et Sancti Andree de Kindrocht (A.D. 1245).

⁴ "Donauit cenobio suo quod construxit apud Munimusc in ecclesia Sancte Marie in qua Keledei antea fuerunt." Carta Johannis Aberdonensis ecclesie Ministri Canonicis de Munimusc de ecclesiis de Loychel, Ruthauen, et Inuernochin. *Liber cartarum Prioratus S. Andree*, pp. 374, 375 (inter A.D. 1199, et A.D. 1207.)

⁵ Confirmatio Canuensionus inter W. Episcopum Sancti Andree et Keledeis, de Munimusc. *Ibid.* and Spalding Club; Collections on the Shire of Aberdeen, pp. 174, 175.

musk; and when the bishop visited Monymusk, the Culdees were required to meet him in solemn procession.¹

The Culdees of Monymusk, after having been denuded of their landed property, were not permitted to hold lands without the consent of the Bishop of St Andrews, or even to acquire possession of property to which he had not first given his assent. And as the lands which were the gift of Gilcrist the Earl of Marr, to the Culdees of Monymusk, Dolbethok, and Fornathy, had never been given with his permission, they were obliged to resign them into the hand of the bishop.²

The disputes between the Culdees and Canons Regular were carried on with great acrimony; and the Culdees, who held the gospel in a purer form, were unable to resist the superior power of the Papal Church, which had mixed up with religion many superstitions and human inventions.

The Romish Church extended, through Innocent III., their protection to the Culdees of Monymusk, after they had become Canons, and confirmed their rights and privileges; but for this, the Pope received two shillings sterling annually from the priory of Monymusk.³

The Roman Catholic Church had succeeded in having its authority recognised in Scotland, through the influence of the Prior and Bishop of St Andrews, which had now become a see, and of which priory of St Andrews, Monymusk was recognised as a cell. David, Bishop of St Andrews, before 1253, restored to the prior and canons of Monymusk one of the properties which had originally been the gift of the Earl of Marr, Dolbethok, with all its pertinents and privileges, for the support of the poor, and the travellers who might wander in that direction, a most judicious gift, had it not been their own property.⁴

Along with Dolbethok de Loychel, the lands of Eglismeneyttok were

¹ Confirmatio Conuensionis inter W. Episc. St. Andree et Keledeos de Munimusc, A.D. 1211.

² Confirmatio Canuensionis inter W. Episcopum Sancti Andree et Keledeos de Munimusc, A.D. 1211.

³ Ad iudicium autem hujus protectionis ab apostolica sede percepte duos solidos sterlingorum nobis nostrisque successoribus annis singulis persoluetis. Datum Viterbii xii., Kalendas Julii, etc. Litera Domini Pape Innocencii inter A. 1198 et A.D. 1216. Confirmatio Conuensionis inter W. Epis. A.D. 1211.

⁴ Carta David Episcopi Sancti Andree de Dolbethoc. Vid. Liber. Cartarum prioratus S. Andree, p. 369.—*Spalding Club Collections*, p. 177.

confirmed to their possessors by Pope Innocent; and if any one should dare to infringe this act, or dispossess them, he should feel the indignation of the omnipotent God and of the apostles Peter and Paul.¹

The next step in the Romish usurpations, was to convert the Culdees and Monks of Monymusk into Canons, which William Lamberton, Bishop of Saint Andrews, accomplished in 1300, when he converted them into Augustinian Canons, such as were those of the Priory of Saint Andrews. They now wore not only the surplice in the church, the rochet of fine linen above the gown, but the almuce, a fine black or grey skin from foreign parts, and frequently lined with ermine, the distinguishing badge of the Canons regular from the other religious orders.

The Bishop of Saint Andrews, who had thus acquired possession of the lands of Keig and Monymusk, and the other properties which he had unjustly usurped, all originally bestowed upon the Culdees of Monymusk, had them constituted into a barony or regality. He sat as Lord Keig and Monymusk in the Scottish Parliament.²

1211. The first prior of this abbey or monastery of Monymusk, which I find recorded in charter, is Brice, Prior of the Culdees, who entered into a contract with William, Bishop of St Andrews, in 1211, in the time of Thomas, Prior of St Andrews, and Master Andrew de Munimusk. It was this prior who agreed, on the part of the monastery, that there should be twelve Culdees, out of whom three were presented to the Bishop of St Andrews, who made choice of the prior from these representatives of the order, and who otherwise moulded the rules of the monastery agreeably to the views and usages of the Roman Catholic Church.³

It appears that in 1496-7, Lord Forbes, who afterwards obtained possession of the lands in Keig, which were originally Culdee lands, and be-

¹ Confirmatio ejusdem Innocencii Pape de terris de Dolbethok de Loychel et de Eglismeneyttok, A.D. 1245.

² Charter by Cardinal David Beaton, Archbishop of St Andrews, to George Earl of Huntly, Cartulary at Gordon Castle, 1543. See "Scottish Heroes in the Days of Wallace and Bruce," by Rev. Alexander Low, Minister of Keig, vol. ii. Appendix, p. 391.

Confirmatio conuensionis inter W. Episcopum Andree et Keledeos de Munimusc, A.D. 1211.

longed to the Bishop of St Andrews, had in some way to account for the teinds at this period. A letter was directed in the king's name to the Lord Forbes, Duncan Forbes, and his wife, to have no intromissions with the teinds of Monymusk, pertaining to Master Gavin of Douglas, and to charge the parishioners to pay their tithes to him and his factors, according to the prior's letters, and to summon the said persons for the twelfth of October.¹

Strachan was prior in the reign of James IV., whose priory church was dedicated to Saint John. He had a natural daughter, who was married to William Forbes in Mersmithock, in Monymusk, grandson to Sir John Forbes, first laird of Tolquhon.²

Dompnus John Hay was a canon regular at Monymusk in 1524, and Master Thomas Sherer was vicar in that convent. He delivered with his own hand to Thomas Rounald in Crag, for preservation, a sum of money, and a silver girdle, with suitable armour of the same, a collar, a silver cross adorned with jewels, two small sleeves, and a casket or small chest. He was exonerated by a deed for so doing.³

1522. The prior of Monymusk at this time was Dompnus David Farlie, who had been appointed successor to Dompnus John Akynheid, in virtue of an apostolic injunction, for whom was reserved, if not the rights, at least the fruits of the benefice.⁴

10th December 1524. Thomas Davidsons of Auchinhamperis, the procurator of the venerable religious father Dompnus John Akynheid, who enjoyed the fruits of the monastery of Monymusk, which were taxed to the amount of twelve pounds,⁵ had access to the presence of Lord Forbes, who promised that he would take possession with his own hand and defend the priory and monastery of Monymusk, and the usufruct of

¹ Lettre for Master Gawane of Douglas, "Registrum De deliberatione Dominorum Consilii."

² Lumsden's Genealogy of Forbes, p. 35, edit. 1819.

³ Thomas Rounaldi fatetur se recepisse pecuniam et bona prius data. Magistro Thoma Scherer vicario de Monymusk, A.D. 1524. Antiquities of the shires of Aberdeen and Banff.—*Spalding Club*.

⁴ Instrumenta super inductione Dompni David Fairlie, in Prioratu de Monimuse, A.D. 1522.

⁵ Instrumentum super solutione summe duodecim librarum taxata in usufructuario de Monimusk, A.D. 1527.

the same, in all his own causes and actions, upon which Thomas took instruments.¹ For this protection extended to the monastery, Lord Forbes received from the prior some privileges and remuneration.

1525. A new seal which had been made for Dene David Farlie, the prior, was next year cancelled, and rendered of no value in confirming deeds, by an instrument which was drawn up in the cemetery of the priory.²

The priors were accustomed to give charters and tacks upon the lands of the monastery and to revoke them. A deed of this description, which had been given by "Dene" Alexander Spens, and "Dene" Richart Straquhyne, some time Priors of Monymusk, and deeds of all other priors, both before and since, and canons made to Duncane David-sone or Thomsone, and to Thomas Davidson his son, on the lands of Easter Loquhel and Wester Foulis, with the mill and their pertinents, were revoked, annulled, and rendered of none effect. This was done by Dompnus or Dene David Farlie, prior of the monastery and abbacy of Monymusk, of the order of St Augustine, within the diocese of Aberdeen, with consent and assent of a reverend father, "Dene" John Aykenheid, and usufructuare of the same, and also with consent of said monastery.³

1533. The monastery of Monymusk seems at this time to have been in a state of insubordination, and the prior Farlie, who was a man of decision, and strict in the observance of his principles, together with the consent of the monastery, brought a certain process before the Apostolic See of Rome, by which the canonical obedience due to the prior was more distinctly defined by Pope Adrian VI. The canons who were called in court were Dene William Wilson, Andrew Masoune, Patrick Andersoune, James Child, and Dene Alane Galt, who promised in all humility the obedience which was due to their superior.⁴

¹ Dominus de Forbes vsufructuarium seu Priorem et Monasterium de Monimvsk insuis causis et actionibus manu tenere et defendere promittit A.D. 1524.—In the General Register House, Edinburgh.

² Instrumentum super cassatione novi sigilli, Monasterii de Monimvsk, A.D. 1525.—In General Register House, Edinburgh; Spalding Club; Antiquities of the Counties of Aberdeen and Banff, vol. iii.

³ Cassatioun of the charteris and takkis maid til Duncane Davidson and Thome Davidson his sone, A.D. 1534.

⁴ Instrumentum super obedientia Canonicorum de Monimvsk suo Priori requisita, A.D. 1533.—In Gen. Regist. Edinburgh.

1535. This monastery, which had been amply endowed, was by no means deficient in moral discipline, and the recent bull obtained at Rome, strengthened greatly the hands of the prior in the discharge of his duties as head of the convent. Dene Allane Galt, a canon of the monastery, had published or done something of an offensive nature against Dene David Farlie, the prior. He was called upon to do penance, which he was unwilling to perform. For which reason the prior charged him by writ, and commanded him under the form of precept, in the virtue of the Holy Spirit, to obey. He charged Dene William Wilsone, superior of the abbey, to pass to Dene Allane Galt, canon of the same, and command him to keep his chamber in the dormitour, and pass not forth from it but of necessity; and that he shall be in continual silence with all men, except him that ministers to his wants, and that he shall be fed on bread and water and ale. On Wednesdays and Fridays he was restricted to his discipline, and no bonnet was to be seen on his head during penance, except his night bonnet, until, through his penance, patience, and humility, he had made recompense to God and religion, and shall be deemed worthy, in our judgment, to be released from penance. "This we command you to do in virtue of spiritual obedience, as ye will answer to God, and return this precept, given and written with our hand at Monymusk, and duly executed and indorsed."¹

1542. John Forbes, commonly called "Bousteous Johnnie," at the instance of David, the same prior, was charged before the sheriff of Aberdeen, with occupying and labouring four oxengang of the priory, and convent-lands of Eglismenathok, and the Court discerned against Forbes.³

7th April 1542. The lordship of Keig and Monymusk, which was distinct from the priory lands, was bestowed by charter in feu on George Earl of Huntly, by David Beaton, Cardinal Archbishop of St Andrews, and Pope's Legate. It consisted of the baronies of Keig and Monymusk, within the regality of St Andrews, and county of Aberdeen, and was to be held by him and his heirs in perpetual feu-farm, for payment of a feu-

¹ Instrumenta super Dompno Allano Galt, canonico de Monimvsk.—In Gen Register, Edinburgh, A.D. 1535.

² Lumsden's Genealogy of Forbes, p. 35.

³ Antiquities of the Shires of Aberdeen and Banff, vol. iii.

rent, amounting, with the augmentation of the rental, to the sum of three hundred pounds Scots money.¹

The Earl of Huntly and his heirs were at the same time constituted heritable bailies of this lordship of the Church, and were bound to do their best endeavour to keep the marches of Keig and Monymusk.

1542-3. John Elphinstone, canon of Aberdeen, and parson of Invernochty, was presented to the priory of Monymusk in 1542-3, by the Earl of Arran in the year 1542-3.² He was the son of Alexander Lord Elphinstone, and Catherine, daughter to John Lord Erskin.

1545. The only one of the heads of this monastic institution who distinguished himself was John Hay, prior of Monymusk, who was sent as envoy by Queen Mary to Queen Elizabeth in 1545.

1556. Robert, the fourth son of William Lord Forbes by Elizabeth, daughter of Sir William Keith, became prior in 1556; and, being well versed in the Scriptures, he was converted to the Protestant faith, and married Agnes, daughter of William Forbes of Corse, and had several children, three of whom were officers in the army.³

The priory of Monymusk, like all other Catholic institutions, was broken up, and the lands seized, at the Reformation. Those of Monymusk parish probably fell into the hands of Duncan, son of William Forbes of Corsinda, who had been infested by the canons in certain lands on the Manor or Mains of Monymusk, in feu-farm or heritage.⁴ Being in possession of the Mains of Monymusk in feu-farm, he had less difficulty in obtaining possession of that part of Monymusk parish which belonged to the abbey, when these Church prizes were agoing; and it seems he built the manor-house of Monymusk out of the stones

¹ Charter dated at St Andrews, and subscribed by the Archbishop David, Card. lig. St Andree, 7 Aprilis 1542. *N.B.*—This is a most accurate and ample deed. —Gordon Castle, Cartul, 11 . 3 . 1.—See “Scottish Heroes, in the days of Wallace and Bruce,” by Rev. Alexander Low, A.M., Minister of Keig, Cor. Mem. of S.A. Scot.

² *Epistolæ Regum Scotiæ*, vol. ii.

³ Lumsden's Manuscript Genealogy of Forbes, p. 34.

⁴ Carta magistri Duncani Forbes de Monymusk de manerie de Monymusk per Davidem Priorem cum consensu sui coadjutoris, A.D. 1549.—*Conformacioun of the channons of Monimusc*, A.D. 1500, in the charter chest of Monymusk.

of the monastery, and was the founder of the family of Forbes of Monymusk, Baronet. It appears that this priory, no traces of which are now to be found, was annexed, in 1617, to the Bishopric of Dunblane, when that Bishop was appointed perpetual Dean of the Chapel Royal.

Of these church-lands, the proportion appropriated to the maintenance of this priory seems to have been very small, namely, the lands of Abernethok, Ramestone, Arneedly, and Balvack, in the parish of Monymusk, together with a croft sowing four bolls of bear, and pasture land for six horses, and fifteen wethers. These lands of the monastery belonging to Monymusk were those which probably fell into the possession of Duncan, son of William Forbes of Corsinda, when the abbey was abolished at the Reformation. A school or gymnasium for the education of the young was erected out of the buildings or the priory,—an institution, if not so imposing, at least equally useful with the original. The buildings of the monastery or convent, when deserted, became ruinous; and Robert the commendator, and, by Divine permission, prior, considering that the buildings were utterly decayed, and that all the canons were dead, and that a gymnasium for the young had been erected, bestowed by charter on William Forbes of Monymusk, the son of Duncan Forbes, the feuer of the manor lands, all the ruinous houses of the monastery, and a croft of land sowing four bolls of bear, situated to the north-east of the monastery.¹ These lands were feued for twenty-six shillings and eightpence; the pasture for six horses and fifteen sheep for ten shillings Scots annually; the price of the buildings and gardens amounted to thirty shillings Scots.²

That part of the lordship of Keig and Monymusk which is situated in the parish of Keig, afterwards came into the hands of Lord Forbes; and the greater part of it is at this day possessed by this ancient family. Thus these lands were alienated from the Church four hundred and sixty-two years after they had been bestowed upon the Culdees by King Malcolm, and the priory suppressed at the Reformation.

¹ Chartour of the ruinouse hous of Monymusk be Robert Commendatour. "Robertus, Prior Prioratus de Monymusk," sine dato. In the charter chest at Monymusk.

² Chartour of the ruinouse hous of Monymusk be Robert Commendatour, sine dato.

MONDAY, 12th June 1865.

JOSEPH ROBERTSON, Esq., Vice-President, in the Chair.

The following Gentlemen were balloted for, and elected Fellows of the Society :—

JAMES HORSBRUGH of Lochmalony, Esq., Fife.

Rev. JAMES CAMPBELL, Minister of Balmerino, Fife.

The following Donations to the Museum and Library were laid on the table, and thanks were voted to the Donors :—

(1.) By JOHN HAY, Esq. of Letham.

Large Boulder of Sandstone of irregular form, measuring in greatest height 31 inches, breadth 44 inches, and thickness 11 inches. The whole surface of both sides is covered with incised cups, and the cups are surrounded, in some by a single, and in others by a double concentric circle. The cups measure in diameter from 1 to 2 inches, and the concentric circles from $3\frac{1}{2}$ to $9\frac{1}{2}$ inches. The stone was found in a "Pict's House" at Letham Grange, Forfarshire.

(2.) By WILLIAM WALKER, farmer, Fyrish, through the Rev. Andrew Mackenzie, Kilmorack, Beaully, Inverness-shire.

Human Skull; with a Sepulchral Urn of reddish-coloured clay, measuring 6 inches in height, 6 inches across the mouth, and 3 inches across the base. It has round the upper part five parallel belts of incised lines, two plain or unornamented, the others divided into compartments formed by diagonal lines, three of them being crossed by small perpendicular lines. The middle portion of the urn is surrounded by a broad belt of ornamentation, consisting of Vandyke and perpendicular lines; and below, near the base, are four parallel lines; and an ornament of fine-grained greenish-coloured stone, measuring $4\frac{1}{2}$ inches in length by $1\frac{1}{4}$ inch in breadth. It is rounded above—the inner surface being concave; and at each corner is a small perforation, as if for fastening it as an ornament to the dress.

The urn and stone were found, along with the skull and the remains of a skeleton, in a short cist on the farm of Fyrish, Evantown, Ross-shire.

(3.) By T. F. JAMIESON, Esq., Ellon.

Specimens of Flakes and chipped portions of Flint. The colours of the flints are red, gray, and yellowish. Found in the district of Buchan, Aberdeenshire. (See Communication, page 240.)

(4.) Rev. JOHN CHRISTIE, Kildrummy.

Arrow Head of yellowish-coloured flint, with barbs and stem, measuring 1 inch in length; it was found in the parish of Kildrummy, Aberdeenshire.

(5.) By Mr JAMES PATERSON, Longman, Macduff.

Small leaf-shaped Arrow Head of reddish-coloured flint, measuring $\frac{3}{4}$ inch in length, found at Longman, Macduff, Banffshire.

(6.) By ARTHUR MITCHELL, M.D., Corr. Mem. S.A. Scot.

Flakes and chipped portions of reddish-coloured Flint; also portions of Flint which had been exposed to the action of fire.

Chip or Splinter of Fir, measuring 2 inches long, $1\frac{1}{2}$ inch broad, and $\frac{1}{4}$ inch in thickness, found in gravel under peat, in the parish of Abernethy, on Speyside, Elginshire. (See Communication, page 251.)

(7.) By Mrs JOHN SCOTT, 2 Mansion House Road, through George Sim, Esq., Curator of Coins, S.A. Scot.

Celt of Clay Ironstone, measuring $10\frac{1}{2}$ inches in length by $3\frac{1}{2}$ inches across the cutting edge, terminating at the other end in a sharp point. It was found in 1848 in ploughing in a field near Fala, Edinburghshire.

Finger-Ring of Gold, weighing 100 grains, inscribed ✠ **Jaspar. melchior. baltazar.** Found in digging the foundation of the Water Company's new Reservoir, Castle-Hill, Edinburgh.

Oval Badge of Silver, measuring $1\frac{3}{4}$ inch in length, by $1\frac{1}{2}$ inch in breadth, displaying in relief the Royal Arms of Scotland, and supporters; and a small Baton of Ebony, tipped with silver, measuring 3 inches in length by $\frac{1}{2}$ inch in diameter. On the baton is a moveable ring of silver.

These form the official badges of a "messenger-at-arms," and are exhibited by him "*in nomine regis*" when about to perform certain duties of his office; when deforced, the officer slides the moveable ring on the baton from one end to the other, which in law is held to be equivalent

to breaking his official rod. This legal form still continues in use in Scotland. This badge is of a date early in the reign of King George III.

(8.) By Mr GILCHRIST, farmer, Thorneyhill, through the Rev. George Murray, of Balmaclellan, New Galloway.

Rounded Jar of coarse unglazed yellow clay, measuring 12 inches in height, and 4 inches across the mouth, from whence it bulges out to a diameter of 10 inches, and then tapers to the bottom, which terminates in a blunt point. The jar is in shape not unlike a Roman amphora, but without handles. It was found many years ago on the farm of Thorneyhill, on the estate of Kenmure, New Galloway.

(9.) By JOHN KAY, Esq., Kinghorn, Fifeshire.

Portion of a Jar, with a short neck, of gray-coloured clay. It measures 12 inches high, 4 inches across the mouth, and 7 inches across the bottom, the greatest diameter of the body being 10 inches. A handle 2 inches broad projects from one side of the mouth. Three parallel rows of knobs surround the neck, within the space enclosed by the projecting handle. It was found in levelling ground close to the old mansion-house of Abden, Kinghorn, and was filled with coins of Kings Alexander III. and David II. of Scotland; and Edward I., II., III. of England (See Note of the Coins in a Communication by Mr George Sim, Curator of Coins; Proc. Scot. Ant. Soc., vol. v. page 237.)

(10.) By DAVID LAING, Esq., V.P.S.A., Scot.

Flat-shaped Powder Horn, measuring 16 inches in length, 4 inches in breadth at the one end, and tapering to $\frac{1}{2}$ inch square at the other; by $1\frac{1}{4}$ inch in depth at the lower end. It is ornamented by incised concentric circles, &c.; and was found on the battlefield of Sheriffmuir, Perthshire.

Selection of Scots Airs for the Violin, by Peter Urbani. Book 1st and 2d, folio edition.

Six Solos for the Violin, with a Bass. Composed by a Gentleman. Folio. Printed at Edinburgh.

Illustrations of the Lyric Poetry and Music of Scotland, by William Stenhouse; with Notes and Illustrations, by D. Laing. 8vo. Edin. 1853.

Xenophontis quæ exstant Opera, Græce et Latine, ex editionibus Schneideri et Zeunii, accedit Index Latinus. 10 vols. 8vo. Edinburgh, 1811.

Thucydides, Græce et Latine. Accedunt Indices, ex editione, Wassii et Dukeri. 6 vols. 8vo. Edinburgh, 1804.

(11.) By G. R. KINLOCH, Esq., through John Alex. Smith, M.D., Sec. S.A. Scot.

The "Mustard Cap and Ball" formerly used for making mustard in the north of Scotland, a Wooden Cap or Bowl, turned on a lathe, measuring 4 inches deep by 8 inches across the mouth, having a lid or cover with a projecting knob in the centre, for a handle; and an Iron Ball, $3\frac{1}{2}$ inches in diameter. (See Communication, by Dr J. A. Smith, page 255.)

(12.) By the Rev. HENRY A. PATULLO, Manse, Parton, Kirkcudbrightshire.

Oak Pulpit, hexagonal-shaped, measuring 4 feet in height to the edge of the reading-desk. The body is formed of longitudinal panels, carved with an interlaced ribbon; with moulded styles above, terminating in a projecting square billet moulding in three rows. The paneled back rises 4 feet 4 inches above the desk, and is 3 feet 6 inches broad; the centre panel is ornamented with a pattern of interlaced ribbon and leaves, forming heart-shaped devices, and the side panels with vine leaves and grapes. The canopy projects forward from top of back and is flat, it has in its centre a rose-shaped boss, at the angles above are short projecting pinnacles or finials, between which are raised semicircular panels.

FEIR

On the centre of the panels is carved, in relief,

THE LORD
AND HONOR
R HIS HOVS

The one to the right is broken at the top, but shows remains of the letters and date:—

R. G.

1598

and on that to the left is a shield, with armorial bearings, between the letters I. G., of the family of Glendonwyn of Parton, patrons of the parish church, where the pulpit formerly stood, and from whence it was removed upon the erection of a new church in 1834.

(13.) Mr THOMAS VERNON, Jeweller, Leith Street, Edinburgh.

Steel for a Tinder Box, measuring 3 inches in length, with a turned-over handle of a twisted pattern.

(14.) By ALEXANDER BRYSON, Esq., F.S.A. Scot.

Seal of Steel, consisting of a polygonal-shaped handle, 3 inches long, which terminates in an oval seal, $1\frac{3}{4}$ inch in length, on which is incised a mantle, displaying a shield with a death's head and cross bones, and above the crest a barred helmet; with the motto EN! FRATRES MEI VIVUNT! on a band under the shield.

(15.) By HENRY LAING, Esq., Elder Street.

Electrotype Cast of a Medal of William Schevez, Archbishop of St Andrews, consecrated in 1478; measuring $2\frac{3}{4}$ inches in diameter. On the *obverse* is a bust of the Archbishop in very high relief, with profile to the left. On the head is the *berretta* or close cap worn by ecclesiastics. Round the edge of the field, in low relief, is the inscription WILHELMVS + SCHEVEZ + S'CI + ANDREE + ARCHIEPS. *Reverse*, an archiepiscopal cross-staff, surmounted by an escutcheon, quarterly, 1 and 4, three catamountains in pale passant (Schevez of Mureton); 2 and 3, a cross voided in the centre, therein a mullet of six points; a cross-crosslet fitchée on the upper limb of the cross, and the legend LEGATVS + NATVS + & + TOTIVS + REGNI + SCOTIE + PRIMAS + 1491. The date is in Arabic numerals.

This rare medal appears to be of Flemish workmanship. The archbishop was in great favour with King James III.; he was one of the commissioners to effect a truce with Edward IV., King of England, in 1482, and was sent to renew the alliance with France; he was also employed in several negotiations in England. In 1491 a memorable controversy occurred, through the ambition of the Bishop of Glasgow, who prevailed with Pope Innocent VIII. to erect his see into an Archbishopric, thereby exciting the displeasure of the primate, whose power was thus diminished. A settlement was finally effected, by which the sees of Galloway, Argyle, and the Isles were placed under the jurisdiction of Glasgow, whilst St Andrews continued to retain the primacy.

The medal was doubtless struck with some allusion to this controversy, and probably in assertion of the archbishop's authority. The *Legati nati*, according to Ducange, were archbishops or bishops, who enjoyed within their provinces and dioceses the authority of Legates of the Apostolic See.

Mr Henry Laing, in his work on Scottish Seals, describes two seals of the archbishop—one a large oval seal, dated 1480, in the possession of the late Principal Lee of Edinburgh University; the other, a round seal, dated 1494, from a charter at Glamis.

The medal was exhibited by the Rev. H. Wellesley, D.D., Principal of New Inns Hall, Oxford, at the meeting of the Archæological Institute of Great Britain and Ireland, held at Edinburgh, February 1856; and the above account of the medal is taken from the Catalogue, drawn up by Mr Albert Way, of the temporary Museum then exhibited.

(16.) By the Rev. JOHN MILLIGAN, Twynholm.

Third Brass Coin of the Roman Emperor Crispus, struck at London; it was found in the parish of Twynholm, Kirkcudbrightshire.

(17.) By JAMES T. GIBSON-CRAIG, Esq., W.S., F.S.A. Scot.

Ancient Glass Sepulchral Vase, with a flat projecting lip; it measures $7\frac{1}{2}$ inches in height, 6 inches across the mouth, and 4 inches across the bottom; the diameter of the widest part of the bowl-shaped body being $7\frac{1}{2}$ inches. This vase, which shows a beautiful iridescence, from the decay of the glass, was found, with other three, in an ancient Christian tomb in Sardinia; and is described in the "Bulletino Archeologico Sardo, Anno x. Agosto 1864."

(18.) By JOHN TURNBULL, of Abbey St Bathans, Esq., W.S.

Four rude Arrow Heads or Flakes of light-coloured flint, measuring from 2 to 4 inches in length, found in caves in the Wady Meghara in Arabia. (See Communication by Mr Turnbull, page 253.)

(19.) By JAMES STARK, M.D.

Bronze Amulet or Priapus, and a small Brass Coin of Diocletian, struck at Alexandria, in Egypt, found at Ostia, near Rome, when digging the foundation of a house.

(20.) By JAMES T. IRVING, Esq., architect, London.

Various Etchings by the Donor, of Orcadian Antiquities in the Museum of the Society; View of Scalloway Castle, Standing Stone in Garth of Papil, North Yell, &c., &c.; Monumental Slabs at Sandwick, Unst, Shetland.

(21.) By the Rev. JOHN MAUGHAN, Rectory, Bewcastle.

Photographs, 4 inches by 6 inches, showing the four sides of a Sculptured Cross at Bewcastle, Cumberland.

Also, Photograph of an Inscription in Runes on a crag at Baronspike, Cumberland. A translation of the runes is given by Dr Charlton, in the "Archæologia Ælinana," part 21, new series, September 1866.

(22.) By the Right Hon. the EARL of DUNRAVEN and MOUNTEARLE, F.S.A. Scot.

Memorials of Adare Manor, by Caroline, Countess of Dunraven; with Historical Notices of Adare, by her Son, the Earl of Dunraven. Printed for private circulation. 4to. Oxford, 1865.

(23.) By JAMES D. MARWICK, Esq. (the Author).

The Precedency of Edinburgh and Dublin; Proceedings in the Privy Council in the question as to the Precedence of the Corporations of Edinburgh and Dublin in presenting Addresses to the Sovereign. 4to. Edinburgh, 1865.

(24.) By the Rev. J. H. POLLEXFEN, Colchester (the Author).

On a hoard of Gold Ornaments, Coins, &c., found at Bute, and now in the Museum of the Society. 8vo. (Pp. 16). London, 1865. (See Proceedings of the Society, vol. v. page 372.)

(25.) By LIEUTENANT HENRY BRACKENBURY, R.A. (the Author.)

Ancient Cannon in Europe. Part I. (Pp. 24). Woolwich, 1865.

(26.) By GEORGE SIM, Esq., Curator of Coins, S.A. Scot.

"Edinburgh Advertiser" for September 7, 1781, containing a notice of a Meeting of the Society of Antiquaries of Scotland, shortly after its formation.

The following Communications were read :—

I.

ON SOME REMAINS OF THE STONE PERIOD IN THE BUCHAN DISTRICT OF ABERDEENSHIRE. By THOMAS F. JAMIESON, Esq., ELLON.

Along both sides of the river Ythan, near its junction with the sea, there seems to have existed a settlement of people who used flint tools, and lived a good deal upon the shell fish that are found in the adjoining estuary. There are several spots on either bank of the river, between the village of Ellon and the sea, where I have observed a great quantity of flint chippings and flint flakes, the debris, as it were, of a manufacture of stone weapons; and so thickly are these flints scattered about, that one can sometimes point with confidence to the very spots where the people seem to have sat and wrought at them. This is the case in some places amongst the drifted sand near the sea, and also to a less extent in a field on the farm of Mains of Waterton.

I have likewise remarked a great many artificially chipped flints in the surface of the fields near Ravenscraig Castle, on the north bank of the Ugie; and the Rev. Dr Forsyth, in the "Statistical Account of the Parish of Belhelvie," mentions the occurrence of a quantity of yellow flints on the alluvial soil near the sea there; and amongst them some well-formed arrow-heads, he says, are frequently found. These flint arrow-heads occur on the surface of the fields all over the district, and are picked up by the ploughmen when harrowing, although it is rare now to meet with them.

The source from whence the natives of this part of Scotland might have obtained their flints can readily be pointed out. There is a low moory ridge, extending from the coast near Peterhead, for about eight or nine miles inland, to a place called the Bog of Ardallie. The height of this ridge is from nearly 300 to 500 feet above the sea, and it is all over-spread with water-worn pebbles of flint, generally in greatest abundance along the crest of the ridge. These flints have been derived from some bed of chalk that probably once existed here, as the characteristic fossils of the Chalk period may be detected in them. The flint gravel is several feet thick in some places, as, for example, in the Den of Bod-

dam. Patches of the same nature occur in a few other spots in the north-eastern part of Aberdeenshire, but nowhere in anything like the same abundance as along this ridge. The natives therefore could have no difficulty in obtaining any quantity of flint. I have observed that the flint flakes and chippings sometimes occur in considerable abundance near the beach, and only a few feet above the present reach of the tides. We have also on both sides of the estuary of the Ythan old mounds of shells, somewhat like the Kjökken-möddings of Denmark, and situated occasionally so low that a depression of three feet, or less, would expose them to the inroad of the sea. Flint flakes and chips occur on the surface of some of these mounds, amongst the decayed shells, and more plentifully in the neighbourhood of them, so that there is every reason to suppose the shell-heaps were made up by the chippers of the flints. From this low position, I infer that there has been no noticeable elevation of the land since the lowest of these shell heaps were formed, nor since these flint chippings came to be where they are. There is good evidence, however, of an elevation of the coast having taken place here, to the extent of six or eight feet, within a very recent geological period; for on both sides of the estuary I have observed elevated banks of estuary mud, containing remains of shell fish, all of the kinds now living in the river, with the exception of one species, the *Scrobicularia piperata*, which seems to have died out in this locality; and I may mention that I have seen no remains of this species in the shell mounds. Part of the village of Newburgh is built on this old estuary mud, and the shell-bed was well exposed lately in cutting a deep drain through the croft land to the north of the village, and likewise on the opposite bank of the river near Waterside.¹ As some of the shell-heaps are situated on the top of this raised sea-margin, and fringe of estuary mud, I think there can be no doubt that the people to whom they belonged continued to live here long after this slight rise of the coast took place.

The relation of the shell heaps and flints to the blown sand also shows them to belong to a comparatively recent period; for the shell heaps are

¹ Some further remarks on this subject will be found in a paper communicated by me to the Geological Society of London, "On the History of the Last Geological Changes in Scotland," and which will appear in the August Number of the Quarterly Journal of that Society for this year (1865).

situated on the top of some thickness of drift sand, while seams of it are interstratified with the decayed shells and charcoal, showing that drifting of the sand had previously begun and continued to go on during the period the shells and rubbish were accumulating.

The amount of blown sand along the coast here is very great, forming some immense piles, and it has overspread a large tract of what was once a parish called Forvie, now part of Slains. This desolation of the land of Forvie, the traditions say, was owing to a sudden catastrophe that occurred some centuries ago, but the exact date of which is unknown. It is quite possible that some extraordinary gales may have occasioned a sudden dispersion of the sand, if large masses of it had previously been heaped up in the neighbourhood; but there can be no doubt that its accumulation must have been going on gradually for a very lengthened period—in fact, ever since the establishment of the present coast line.

There are some places where, owing to the direction of the eddies of wind, the sand does not lodge. At one of these spots, in the Forvie district, there is a bank, having only a thin covering of sand, where I discovered traces of what seems to have been an encampment of the flint folk. Flint flakes and chippings of various shapes are scattered all over the surface, and on turning up the ground with a spade, I found a stratum of black carbonaceous matter below which the reddish clay sub-soil is quite discoloured, as if there had been numerous fires. This is in the midst of the Forvie sands, not very far from the sea beach. Probably many similar spots are now hidden by the sand. At Annochie, on the coast of St Fergus, where a brickwork was at one time in operation, there is a spot in which a good many bones and teeth of various animals are met with underneath a thin layer of blown sand. These bones occur in a bed of blackish sandy loam, a foot or two feet thick, and along with the bones there are many stones, which seem to have been exposed to the action of fire; there are also a good many periwinkle and limpet shells. I did not remark any flints. The bones and teeth seem to belong chiefly to domestic animals.

The shell heaps at the mouth of the Ythan occur chiefly on the north side of the estuary, along an uninhabited desolate tract of blown sand. There are, however, some on the south side. These heaps are generally from thirty to ninety yards in length, and are situated on mounds of

blown sand. The stratum of shells is sometimes only a few inches deep; in other cases, layers of shells and sand alternate with one another to a depth of several yards; and in one mound there is a thickness of four or five feet, consisting entirely of shells. The most plentiful species is the mussel, but there are also a good many cockles and periwinkles—all of them large and full-grown specimens. Intermixed with the shells there is always a number of stones, which have evidently been in a fire; and one of the largest mounds is strewn all over with small stones, a great many of which have a scorched appearance. There is also always a mixture of charcoal, or what seems to be remains of charred turf, with some bits of burnt twigs. On some of the mounds there appear to have been small fires here and there, as if for cooking. In these spots clusters of burnt stones occur on the surface, along with a more than usual quantity of charcoal; while the sand underneath occasionally shows a reddish tinge, as if from the effect of fire. I also found a few teeth¹ and bits of bones on the surface, and a flint or two may be picked up with the appearance of having been in the fire. No metal nor pottery has been observed; but as the mounds have not been much dug into, something of the sort may yet be found. In examining some of these mounds, I was accompanied on one occasion by my friend Mr Robert Dawson, from Cruden, and we dug for an hour or two among those on the north side of the river that lie immediately opposite Newburgh, but we did not find anything except shells, charcoal, and burnt stones; not a single bone nor flint occurred. On the south side, near the village of Newburgh, there is a pit excavated in a thick mass of blown sand, where a stratum of blackish loam occurs full of decayed shells, and covered by a thickness of from two to three feet of sand. In this loamy stuff we got some small bits of decayed bone, and a few pieces of red earthenware coarsely and irregularly glazed; these seemed to be fragments of a good large jar. This loamy layer may, however, be a much more recent affair than the shell mounds just described.

At the Den of Boddam there are a great many small pits or excavations, which have long been known under the name of the *Picts' Camps* or the *Picts' Houses*. This Den of Boddam is a small, narrow, winding

¹ Dr Turner, who examined these teeth, says they belong to deer and oxen.

hollow, along which runs a little rivulet or ditch. It lies on the north side of the Stirling Hill, where the great granite quarries of Peterhead are situated. The ground is destitute of trees or bushes, and is covered with heather and peaty turf. The excavations are scattered over the surface of a sloping bank facing the south, giving it a sort of honey-combed or pock-pitted appearance. These pits (which are quite shallow, only a foot or two deep) are made in the flint gravel, and are therefore dry in the bottom. They are a few yards in diameter, but are so irregular, and so mouldered by the lapse of time, that no precise dimensions can be assigned them. They extend, or rather did extend, over several acres of ground, but the operations of agriculture have now obliterated a good many of them, and will probably soon efface the greater part of those that yet remain. I did not observe any heaps of manufactured flints, but Mr Dawson informs me that there is one spot where he has seen a large quantity of chippings, apparently the debris of a manufacture. Nothing certain seems to be known about this curious place, but its traditionary name shows the pits to be of ancient date. The late Provost Grey, who wrote the excellent article on Peterhead in the "Statistical Account of Aberdeenshire," says that these pits are generally known as the "*Picts' Camps*;" and the Rev. Dr Pratt, in his entertaining book on Buchan, states that tradition calls them "*the houses of the Picts*." They look very like the site of an encampment such as the Laplanders make at the present day, who congregate in small huts rudely constructed of turf and sticks; and if our old flint folk were of the same race as the Lapps and Finns—as seems not unlikely—we might suppose that this was one of their retreats. The sheltered, secluded nature of the spot, and its situation on a dry sloping bank facing the sun, would adapt it well for the purpose.

Stone cists, containing sepulchral urns of rudely-manufactured pottery, have been found in various parts of Buchan. They generally occur on some dry gravelly eminence, frequently several of them together. The fact of flint chips and arrow heads being often found in these cists along with the urns, connects them with the period to which belong the shell heaps and other remains I have been describing. These cists have usually been made by digging a square hole, four feet deep or so, and lining the sides of it with large flat stones, on which were placed

covers of the same material. The space enclosed by the stones is generally too small to have allowed a corpse to have been placed at full length; and in most instances few or no bones are met with: there is merely an urn, with a little charred matter in it, and some bits of flint. In one cist, however, I have seen, along with the urn, the remains of a human skull, together with some bones, a shell of the pearl mussel (*Unio margaritifera*), and a few flints.

Another cist, at a few yards' distance from this one, was carefully enclosed with a layer of fine puddled clay. At Cross-stone, near Ellon, a cist was got, containing about a hatful of split flints. Some of the pieces I found to match exactly, showing the original shape of the flints. They had been small flattish pebbles, with a smooth, water-worn surface, and had been neatly cleaved in two by a smart blow on the edge of the pebble.

Traces of rude graves are to be found on the surface of some barren eminences or low hills. In these cases, one observes a small cluster of gray moss-covered stones, like the foundation of a little cairn, but more regularly arranged. On clearing away these stones a spot is found in the centre, containing some charcoal and yellowish earth, with perhaps a flint knife or arrow head, and more rarely a rude urn. My attention was first directed to these old graves by Mr Charles Dalrymple, who discovered and opened a few of them in this neighbourhood.

II.

NOTICE OF SOME HUMAN AND OTHER REMAINS RECENTLY FOUND AT KELSO. BY WILLIAM TURNER, M.B., F.R.S.E.

In the month of May 1864, whilst workmen were engaged in constructing a new system of sewerage in the town of Kelso, various relics of former inhabitants were met with, some account of which may perhaps interest the members of the Society of Antiquaries, and at the same time serve as a contribution to local history. Although not myself a witness of the excavations when in progress, yet having visited the locality shortly afterwards, I have been enabled, through information

received from various gentlemen resident in the town, amongst whom I may more especially mention Mr Andrew Robertson and Mr Clazy, to collect some of the most important facts connected with the objects discovered.

Locality.—Between the iron railing, now enclosing the east end of the ruins of Kelso Abbey, and the Grammar School, is an open space, leading eastward from which is a short narrow passage, called Butts Lane, which is separated from the burial-ground now in use on one side by a high wall. At its eastern end Butts Lane opens into a wide space named the Knowes, the eastern boundary of which is formed by the gas-works.

Objects found.—Through these different localities, drains of considerable depth were cut. At the south end of one drain, which ran across the Knowes from north to south, a short cist was exposed, $4\frac{1}{2}$ feet from the present surface of the ground. It was about $2\frac{1}{2}$ feet square; and its roof, floor, ends, and sides were each formed of a single slab of freestone, about $2\frac{1}{2}$ inches thick. The slabs were simply laid in contact with each other, and, from the absence of cement, earth had worked its way into the cist, and filled it. No bones of any kind were found in the cist; but, on removing the earth, a baked clay urn was met with, which unfortunately broke into fragments on being handled. These fragments came into the possession of Mr John Henderson, who has attempted a restoration of the urn, and has incorporated the pieces in his reconstruction. So far as can now be judged, the urn probably corresponded somewhat in size and form to the largest of the urns from Lesmurdie, now in the Society's Museum. The ornamentation is, however, very simple, and consists merely of horizontal grooves, arranged in groups of two or three, with short vertical grooves, situated intermediate to the group of horizontal ones. The urn will, I believe, be placed in the Kelso Museum. From the form of the cist, and the occurrence of an urn in it, this grave evidently belongs to an early period of Scottish history.

Another drain traversed the Knowes from east to west, and was prolonged in the same direction along Butts Lane. Whilst excavating for it in both these localities, several cists were exposed, which differed in their characters from the short cist just described. They were situated about 6 feet from the present surface of the ground, were 5 feet and

upwards in length, and were placed east and west. They were formed of freestone slabs, and in many cases so filled with earth that the bones contained in them were not recoverable. The mode of construction of two of these long cists was particularly noted by Mr Robertson. They were both built of loose slabs of freestone. Each possessed a head-piece at the western end, then widened out abruptly at the shoulders, and tapered somewhat towards the feet. These cists lay parallel, and were not more than a yard apart. The one situated more to the southward had the place for the head built of stones laid on their sides, whilst the northmost one was constructed of slabs placed on their edges. The latter possessed the following dimensions:—6 feet 4 inches long, 18 inches wide at the shoulders, and 12 inches deep. It contained a skeleton in the fully extended position, the head of which was at the western end of the cist. Wrapped around the skeleton was a large mortcloth, formed of a coarsely woven material, parts of which, still in an excellent state of preservation, showed very clearly the texture of the fabric. None of the bones contained in this cist were preserved. The covering slabs on the southernmost cist were not in such close apposition as on the one just described, so that the earth had entered it, and partially covered and displaced the bones. The skull, evidently that of an old person, differing in no essential features from modern Scottish crania, has been preserved. No trace of a mortcloth was found in this cist.

In addition to the human and other remains just described, a large number of loose human bones was met with, both in Butts Lane and in the excavations made across the open space between the Abbey railing and the Grammar School, unenclosed in cists or coffins. These occurred in such numbers in some places as to give the impression that no systematic burial had been performed, but that a trench had been dug, and the bodies thrown indiscriminately into it.

About three feet to the southward of the cist which contained the skeleton invested by the mortcloth, a number of coins was found lying loose in the earth. Those which I had an opportunity of examining were testoons or shillings, belonging to the debased coinage of the reign of King Edward VI. On the one side is a profile of the king, surrounded by EDWARD VI. D. G. AGL. FRA. Z: HIB. REX. Y. On the reverse, an oval shield, quartered with the arms of England, and surrounded by the motto

TIMOR DOMINI FONS VITE. MDXLIX. Y. In addition to the numerous specimens of this coin, Mr George Sim informs me, that in the course of the excavation a bodle of King Charles I. and a defaced hawbee were found, though in what locality, or in what depth from the surface, it is now impossible to say.

The circumstance of so many coins of the reign of Edward VI. being discovered, in such close proximity to the numerous loose bones met with in the neighbourhood of the Abbey, would seem to point to some relation as regards age between them. It is a well-known fact in Border history, that in the later years of the reign of King Henry VIII., and during the short reign of Edward VI., Kelso Abbey was the scene of many a fierce and bloody fight between the rival chieftains of the Scottish and English borders. These bones may perhaps be the relics of some of the combatants; and from the irregular manner in which they were arranged, and the absence of any remains of coffins around them, it would seem as if the bodies had been thrown into a trench, with none of the usual accompaniments of a formal burial.

The long stone coffins already described belong apparently to an earlier period; but it will be difficult to fix the time of their construction, for evidence is still wanting to establish with precision the dates when this mode of burial was first adopted, and when it terminated. From the form of the cists, however, more especially the existence of a distinct piece for the head, I am inclined to think that these coffins belong to the later rather than the earlier period of adoption of this form of interment; and it is probable that they must be ascribed to mediæval times. The existence of a woven fabric around the skeleton contained in one of these cists is a circumstance of some interest. Several examples of shrouds obtained from ancient tombs are already in the Society's Museum, as the knitted garment from a stone cist in Yorkshire, the leathern shroud from a stone coffin in Dunfermline Abbey, and portions of ecclesiastical raiment from the tombs of bishops in the Glasgow and Fortrose Cathedrals. But this specimen differs, both in its mode of construction and in the material of which it is composed, from any of those just alluded to. The fibre is evidently vegetable, and of considerable strength, but it is difficult to say from what plant it has been obtained. One might surmise that it is a coarse flax or hemp; but the characters by which

these forms of vegetable fibre differ from others of an allied nature are not sufficiently precise to enable one to pronounce with certainty as to its origin. In the process of constructing the garment, the fibre had at first been spun into a coarse thread, the thickness of whip-cord, which thread had been loosely woven by a simple interlacement of warp and weft, and the spaces between the crossing of the threads had then been partially filled up apparently by a felting process. The specimen now exhibited will be deposited in the Museum of the Antiquaries.

The relics of bygone times brought to light in the course of these excavations prove that the locality, which is still employed as a burial-ground by the present residents in the town of Kelso, had been devoted to the same purpose, not only by their mediæval forefathers, but by the rude inhabitants of the district in pre-historic times, and that, long before the stately pile of Kelso Abbey served as the last resting-place of monk and warrior, the ancient Caledonians had chosen as their place of sepulture one of the most beautiful sites on the banks of the silver Tweed.

III.

EIRDE HOUSE AT ERIBOLL, IN THE PARISH OF DURNES, SUTHERLANDSHIRE. By ARTHUR MITCHELL, M.D., CORR. MEM. S.A. SCOT.

In a cultivated field behind the House of Eriboll there is an underground or eirde house of considerable interest.

It was cleared out by Alexander Clarke, Esq., some years ago, and can now be minutely examined. No objects of interest were found during the excavation. Its site is not indicated by any knoll or accumulation of earth above it.

Reference is made to the following plans and sections (which are drawn to scale) as the briefest way of describing its construction and general features.

The whole length of the passage is 33 feet, but it is known to have been 10 or 12 feet longer than it is at present.

The passage at its entrance is less than 2 feet wide, and under 4 feet high. The average height of the passage is only 4 feet, and its average

width 2 feet. It is not straight, but shows a sharp bend at D, and a slight one at C.

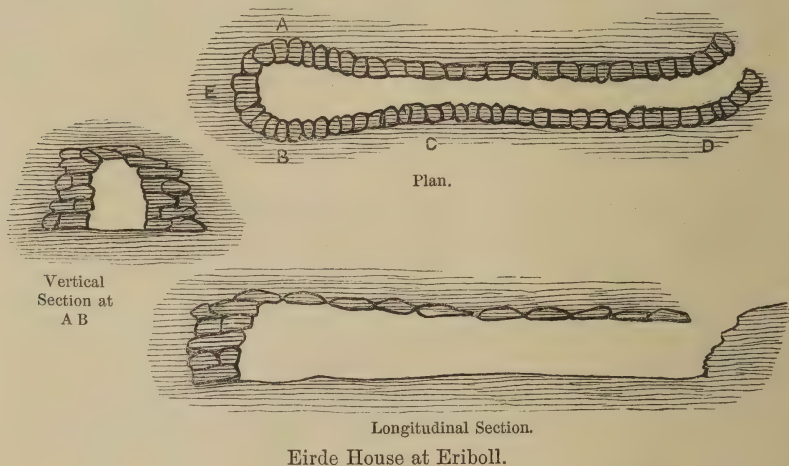
The expansion, or pear-shaped chamber, at the end gives the following measurements:—

At 1 foot from the end (E) it is $3\frac{1}{2}$ feet wide, and $4\frac{1}{2}$ feet high.

At 5 feet " " 2 " $4\frac{1}{4}$ "

At 7 feet " " 2 " 4 "

That which gives interest and character to this eirde house is the smallness of the expansion or chamber, which, at its widest part, is only $3\frac{1}{2}$ feet, and this width it only retains for 3 feet of its length. It is exceedingly difficult to see what purpose such a structure could have served. It is worthy of note, however, that in the district similar underground houses are called "Leabidh fholaich" or "Hiding beds."



Other structures of this kind exist in Sutherlandshire, but I believe this is the first which has been described. There is one known to me in Strath Helmsdale, near the river side, and about two miles above Kil-donan Lodge.

Both of these resemble in a very striking manner the eirde house which I recently described to the Society, and which are situated in Strathdon, Aberdeenshire.

IV.

NOTICE OF FLINT FLAKES FOUND IN THE PARISH OF ABERNETHY, STRATHSPEY. BY ARTHUR MITCHELL, M.D., CORR. MEM. S.A. SCOT.

There are several places in this parish, where, it is well known, any one will find *flint flakes* who digs for them. My attention was directed to this fact by the Rev. Mr Forsyth, with whom I visited one of the localities, where we found, after half an hour's search, the specimens which are now exhibited. The spot alluded to is situated at Clachaig, about a mile and a-half from the manse. It is near the present course of the river Nethy, but still nearer to what is believed to be its old course. The flakes are found below a layer of peat, which is two to three feet thick, which covers a piece of flat land several acres in extent, and which lies on water-worn gravel and sand. Some of them were found immediately below the peat and *on* the gravel, but others were found *in* the gravel at a depth of 4 or 6 inches. Along with these last was found the chip of fir wood, also exhibited, which bears evidence of having being cut with a sharp instrument, and which from the direction of the cut surfaces appears to have been shaped by two such strokes of an axe as are usually given in felling a tree. This chip, as I have said, was found, along with some of the flakes, below the peat and also below some inches of the gravel.

On examining the peat, it was quite clear that it was not in the position of growth. It had at some time or other been broken up and made into a paste by water, from which it had again been deposited. Here and there, at all depths in it, there were streaks of water-worn sand similar to that which was below it. It is possible, therefore, that some flood had carried it down from the immense peat fields which are found higher up the river's course.

None of the flakes found by me were chipped on the edges. It is said, however, that some have been found so chipped, and looking as if there had been an intention to shape them into arrow heads. One well-formed arrow head is said to have been found near the spot we examined, but *this find* is not well authenticated.

The position in which these flakes were discovered, and the presence of the chip of wood among them, indicate that they have been moved by the river from the place they originally occupied.

It is said that a man residing near the diggings at Clachaig, but on the other side of the Nethy, once found a large round unbroken stone, 3 or 4 inches in diameter, which turned out to be flint.

About two miles higher up the Nethy than Clachaig, on the opposite side, there is a place called Lynmagilbert, where a man ploughing turned up a great number of flint flakes. This happened some years ago. They were lying in a heap between two stones. Mr Forsyth has seen some flakes from this place, and says they are in all respects like those we found at Clachaig.

Two or three miles still farther up the Nethy, near its course, but not so nearly on its level, similar flints are also found.

V.

NOTE OF TWO BRONZE SWORDS, RECENTLY FOUND UNDER MOSS AT SOUTH UIST. BY CAPTAIN F. W. L. THOMAS, R.N., CORR. MEM. S.A. SCOT.

An interesting *find* has occurred in South Uist lately. Two leaf-shaped bronze swords were dug up at Iochdar (pronounced Io-cher), which is the north-west end of South Uist, when cutting peats. On Mr MacRory sending me the information, I addressed some questions to him, and his answers are to the following effect:—

“The depth of the peat was 10 or 12 feet.

“The swords were at the bottom of the peat, and upon the soil (boulder clay).

“An arm of the sea comes within 100 yards or so of the site of the place where the swords were found; it is on the east side of the main road leading to South Uist. One house is very near the place.

“The shape is exactly like the drawing you enclosed of the swords found at Arthur's Seat (copied from Pre-Historic Annals). Length, 24 inches; pointed breadth of blade at broadest, $1\frac{5}{8}$ inch; tapering towards both extremities; $1\frac{1}{4}$ inch near the handle. No guard. The

handles, I was told, were covered with wood, which, of course, crumbled to dust when touched. There was a leather sheath, but they did not care much about it, thinking the weapons were *gold*.

"I am in possession of one of them; it is the smallest, and I intend keeping it as a curiosity. The man who found them has the other; it is longer and heavier than mine.

"No marking nor engraving."

This discovery has important bearings. I have established (to my own satisfaction) that the stone monuments of the Outer Hebrides were placed before the peat was there, and I had myself found the charcoal ashes of a fire over which the peat had grown ten feet, but which peat bank was brought to the water's edge by the subsidence which is now taking place of this group of islands. The peat, on *weathering*, shows a laminated structure; and assuming that each lamina represents a year's growth, the whole peat of Lewis may have accumulated in 900 years, and in the Uists in 1200 years. But, without accepting these results of calculations absolutely, it may be safely assumed that peat is geologically and anthropologically a very recent production, and these bronze swords support that view.

VI.

NOTICE OF FLINTS, FROM CAVES IN THE WADY MEGHARA, IN ARABIA. BY JOHN TURNBULL, W.S., OF ABBEY ST BATHANS, ESQ.

When travelling, in March 1862, in the Sinaitic peninsula, I visited a gentleman (Major M'Donald), who had been resident there for some time, engaged in mining turquoises. From him I got the flints which I now send, that they may be presented to the Society of Antiquaries, if of sufficient interest.

The few I brought home were selected from a considerable number in the possession of Major M'Donald, and which had been obtained by him from time to time from the Arabs in his employment, who found them in the caverns or ancient mines which exist in the district. These caverns are in a sandstone formation, and bear evidence, in the chisel

mark still existing, of their partial, or, it may be, entire artificial origin. They are much the same as the quarries or excavations so common in Egypt, and are sometimes of great size. One which I examined in the Wady Meghara contained vast chambers, and extended in length from a quarter to half a mile, with several entrances. I am not aware that the age or purpose of these excavations has been satisfactorily investigated, but Major M'Donald is of opinion that they have been turquoise mines. Excepting flints, the only manufactured articles I heard of having been discovered in them were a wooden model of an elephant and a broken finger ring. The elephant was eight or nine inches high, and though somewhat rudely, was yet well executed. The ring was of bronze, with turquoises set in it—a larger one in the centre, and six smaller ones round the larger—but only three of these latter are left.

The mines in the Wady Meghara are well known to travellers. They have evidently been worked at a period much more recent than that of the flint weapons; for in that valley, and close by the caverns, are found not only Sinaitic inscriptions, but Egyptian tablets, containing hieroglyphics and sculptures, with the cartouche, among others, of Suphis—works which, from their execution, are evidence of a considerable degree of civilisation. Near the openings of the caverns, and scattered over the smooth rocks, are little basins, always two together—one circular, and the other oval. The circular one is generally eight or nine inches in diameter, and the same in depth. The oval one is about the same in width, but 18 or 20 inches long, and not more than 3 or 4 deep. May these not have been used for polishing the turquoises, the circular basin containing the water, and the other having been formed gradually by friction in grinding the stones?

Across this Wady (Meghara), and up the hill on each side, until it rises almost into a precipice, run two stone walls. One of these is close to the opening of the glen, and the other some 200 or 300 yards up it; and between these walls, and, consequently, inclosed by them, are the Egyptian tablets and openings of caverns. The top of the projecting hill on the east of the valley has been cut into a terrace, leaving a conical peak in the centre, and on this terrace are the foundations of about 100 houses or other buildings. The walls run up to this fort, if such it be; and one may be allowed to conjecture that at some remote period

an Egyptian colony was settled here for the purpose of working the mines, and protected themselves by these ramparts; or it may be that it was a penal colony, and that the walls were intended as much to confine the convicts as to exclude the Bedouins.

The flints, however, must be of a date long anterior to this period. The largest of them is 4 inches long by $1\frac{1}{2}$ broad, and the smallest is 2 inches long by $1\frac{1}{4}$ broad. They are evidently shaped artificially, tapering to a point, and being triangular in the cross section, the one side or face, however, being much broader than the other two, and perfectly smooth. Indeed, in general appearance they are not to be distinguished from flint weapons found in this country or Ireland.

VII.

ON THE USE OF THE "MUSTARD CAP AND BULLET" IN THE NORTH OF SCOTLAND. BY JOHN ALEX. SMITH, M.D., SEC. S.A. SCOT.

The Wooden Mustard Cap and Iron Bullet now presented to the Museum of the Society from my friend Mr George R. Kinloch, belong to a class of domestic usages becoming rapidly extinct throughout the country, and are therefore worthy of being recorded among the minor antiquities of Scotland, before they have entirely passed away, and been forgotten.

Some sixty years ago it was the almost universal practice in the Mearns, and, indeed, throughout a great part of Scotland, to grow in the different gardens and kail-yards a patch of white mustard; the crop was sedulously protected from the birds, and the seeds were carefully gathered when ripe, and preserved for family use. The mustard cap and bullet, consisting of a wooden bowl (Scottice, *Cap*), some 8 inches in diameter, by 4 inches in depth, having a wooden cover, and a heavy iron bullet, 3 inches or so in diameter, was then frequently employed to prepare the mustard for domestic use. This was very simply done, by putting the requisite amount of seed, along with a little water, and a slight sprinkling of salt, into the wooden cap, the heavy mustard bullet was then introduced, the lid put on, and a rapid rotatory motion given to the bullet by the movement of the knee and hands, until the

whole was reduced to a pulp sufficiently smooth for use. The bullet was then removed, and in the humbler households, the cap and its contents, being mill and mustard pot in one, was placed on the table, to be used with the potatoes or other vegetables which formed the simple repast. Milk or cream was sometimes added, as an improvement to this simple condiment or sauce.

The mustard, added in this way to the starchy components of the vegetable diet, supplied the necessary nitrogenous elements which would otherwise have been lacking; and reminds one of the analogous hot and stimulating curry which the native of Hindustan finds it necessary to add to his insipid meal of rice.



The Mustard Cap and Bullet.

The not unfrequent use of the mustard in place of animal food (or "kitchen," as it was termed) with vegetables for dinner, even among a somewhat higher class of the community, appears to be referred to in one of the Penny Histories of the last century, entitled "John Thompson's Man; or, a Short Survey of Married Life;" where the writer states that vanity in dress had come to such a height, that rather than not be in the fashion, some people would be content to deprive themselves of everything, except the very cheapest fare, and live, for a time at least, on this inexpensive diet. "For vanity," says he, "is now come to such a height, that vanity was never so vain, nor virtue less prized, in any age than this; for some, if they have no more in the world, must retain the *à la mode* fashion, with their old dagged silk tail,

and pair of old laced shoes, and all her tattering decorations, and these they will not want, if they even should lick mustard a month."

The prevalent use of salted meat by nearly all classes during winter, especially in the country districts, some seventy or eighty years ago, also necessitated a great consumption of mustard. The use of the mustard cap and bullet seems to have prevailed, Mr Kinloch informs me, all over the north-east of Scotland, perhaps even to John o' Groat's, if not also to the Orkney and Shetland Islands—at least from Forfarshire northwards. I have not, however, been able to learn anything of its use in a similar way in the southern parts of Scotland.

The early use of mustard in Scotland is well known, and I need only refer to the fact mentioned in the "Registrum de Aberbrothoc," that in the year 1310 Michael de Monifoth, one of the vassals of the abbacy, binds himself to pay annually to the Abbacy of Arbroath half a boll of mustard seed—"unam dimidiam bollam seminis grani sinapis"—no doubt to be used in the daily meals of the monks.

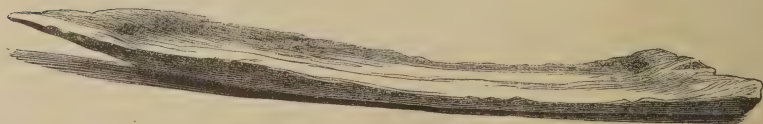
Spottiswoode, in his edition of Hope's "Minor Practicks," 1734, appends a list of the Heirship Moveables, being the articles which the heir-at-law of a prelate, baron, or burgess, dying intestate, is entitled to claim *ex lege*, as his own, and among these he includes the useful "Mustard Bullet;" he does not, however, specify the necessary accompaniment of the mustard cap, but enumerates "a pewter mustard dish," which could not well take the place of the humbler wooden mustard cap, in which the mustard was at once ground and made by the bullet, but was the vessel into which the mustard was removed when ready for use, at least in the houses of the more wealthy classes. The frequent occurrence of iron bullets near old houses in different parts of the country, where they had fallen aside, and their domestic use had been forgotten, has often made the local inquirers into antiquities fancy wild scenes of blood and war, with which these supposed cannon balls had been connected, without thinking that their presence there might probably, in many, if not in most cases, be due to a very different and peaceful family use.

The Coal Bullet.—I may, in addition, notice another of our minor antiquities, belonging to this same domestic class—another and larger kind of iron bullet, the presence of which in some places may have given rise

to similar, and perhaps not altogether unnatural, mistakes—I refer to the “Coal Bullet,” which was also a rather important article in the household economy of our ancestors. “A Bullet for breaking coals,” as it is described by Spottiswoode, and included in the list of Heirship Moveables to which I have already referred. In some cases the coal bullet was pierced with a hole, though which a loop of rope was passed to form a handle.

The use of the coal bullet, however, unlike the previous one, was not apparently known in the northern counties, as I am informed by Mr Kinloch, but seems to have been confined in a great measure to the middle and south-western districts of Scotland. This circumstance may probably be accounted for by the fact of the northern counties having been formerly supplied with coals brought entirely by sea from England, which being soft, and broken into small pieces, rendered the use of any such implement entirely unnecessary; whereas in the more southern counties, where the larger and harder Scots coals were used for fuel, and got from the neighbouring coal pits, the heavy iron bullet or hammer was required as a necessary domestic implement to break them into pieces small enough for ordinary use; in the Border districts, again, from their proximity to England, the English coal was formerly in common use, and the coal bullet was little needed, and apparently scarcely known.

As this meeting concluded the business of the Session, the Society then adjourned to the 30th of November, St Andrew’s Day, the commencement of next Winter’s Session.



Canoe (22 feet 6 inches long) found in Loch Canmore, Aberdeenshire, 1859, and described by the Rev. James Wattie, Bellastraid.

PLANS AND SECTIONS
OF
TUMULI
FOUND IN
TORWOOD AND ITS VICINITY
DUNIPACE
STIRLINGSHIRE

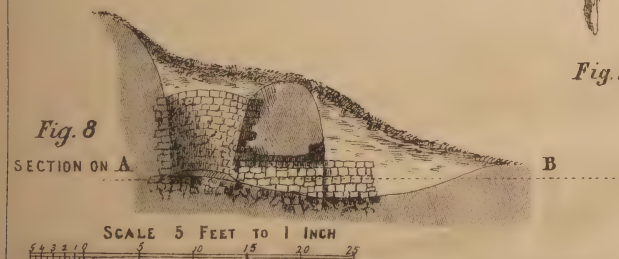
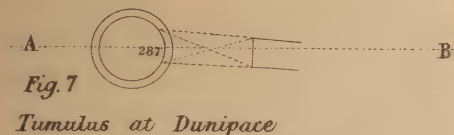
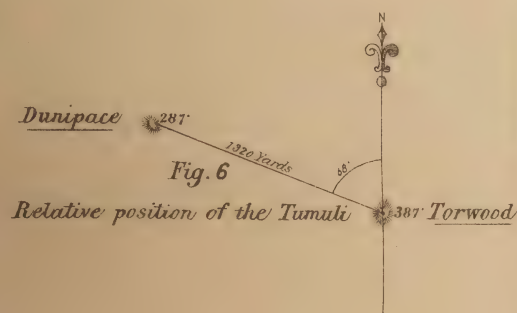
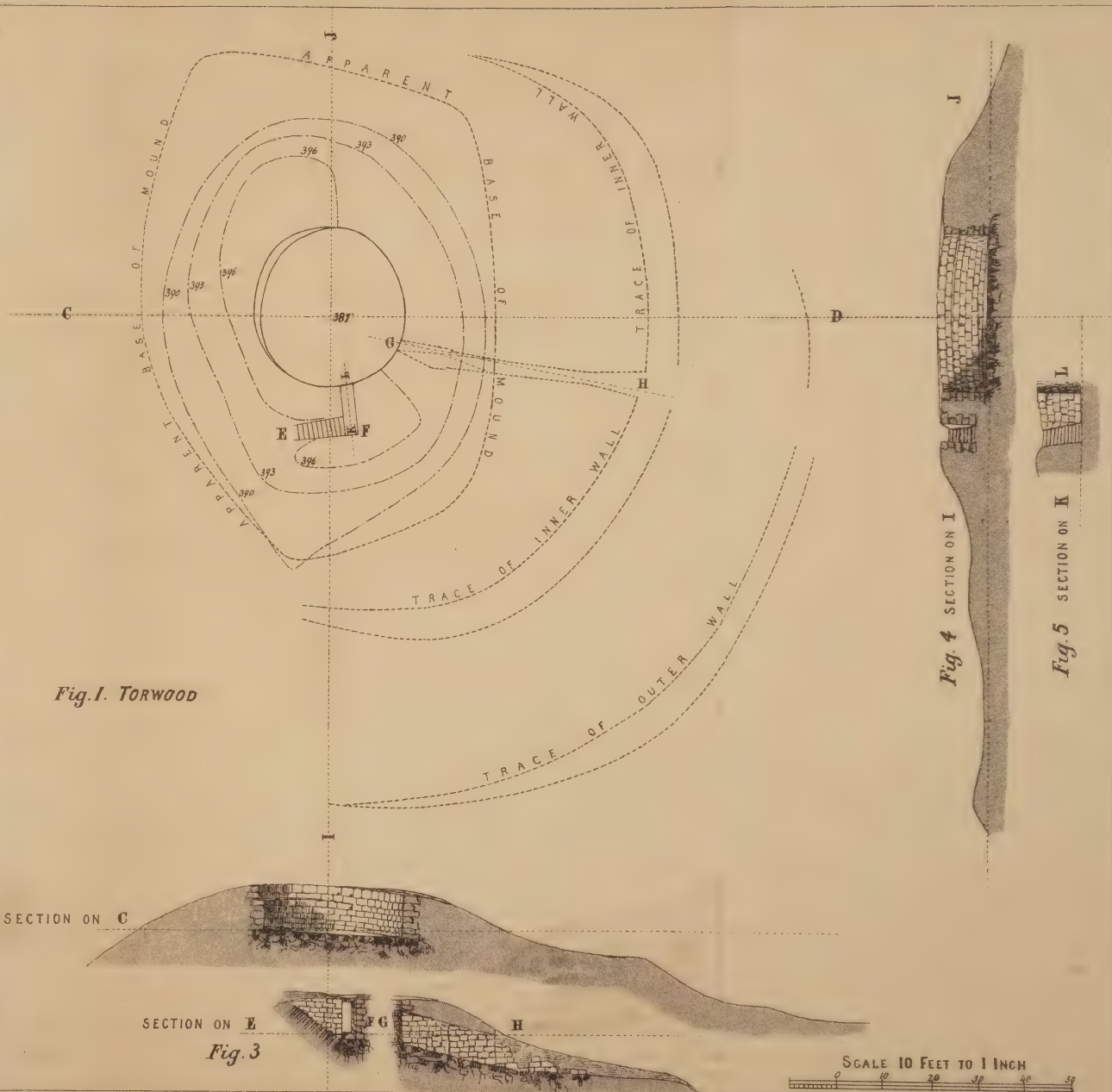


Fig. 2 SECTION ON C

Fig. 1. TORWOOD



[The following Communication was read at a Meeting of the Society on the 13th March 1865, and should have been inserted at page 178.]

VIII.

NOTES ON THE EXCAVATION OF AN ANCIENT BUILDING AT
TAPOCK, IN THE TORWOOD, PARISH OF DUNIPACE, COUNTY OF
STIRLING. BY COLONEL JOSEPH DUNDAS OF CARRONHALL, F.S.A.
SCOT. (PLATES XV. AND XVI.)

Tapock is the highest point in the ancient forest of Torwood, and commands an extensive view of the whole district lying between the Forth and the Carron, as well as of the distant country and mountains beyond those rivers.

The general appearance of Tapock is that of a conical hill or mound, flat on the top; on the west side of the hill there is a precipitous crag of about 100 feet in depth, running north and south for about 800 yards; on the north, east, and south side the slope is gradual. At about 70 feet from the centre of the cone or mound there are the remains of a wall carried round the mound until it reaches the precipice on each side. Beyond this dyke there are the remains of a second wall. Both of these walls, on the earth being removed, are found to be built of large stones, roughly put together, and without cement.

On the south side there are the traces of a third wall extending along the face of the cliff, and filling up those places where the rock is not so abrupt as at the other parts (Plate XV. fig. 1).

The mound at Tapock is known by the country people as the "Roman Camp," and a subterranean passage is supposed by them to lead from it to the old Castle of Torwood, about three-fourths of a mile distant—a famous haunt of Wallace. When we discovered our second passage (fig. 1, G H), this tradition was supposed to be verified. The whole of the mound was, till lately, covered with large fir trees, and the only signs of man's handiwork, besides the dykes above mentioned, was a hole of about four feet deep (fig. E F). In this hole there was a mass of loose stones; and in addition, at about 3 feet below the surface, two large stones lying horizontally, one above the other. A few smaller

stones were visible, which were apparently parts of a piece of rude masonry. In August 1864, workmen were set to clear out this hole, under the superintendence of General Lefroy, R.A., and myself.

This hole was on the south side of the mound. When the large stones and rubbish had been removed, we found ourselves in a passage $11\frac{3}{4}$ feet in length and 3 feet in breadth, and terminating at the end near the mound in a doorway, the sides of which, composed of large stones irregularly built, have an inclination outwards. The top or lintel is formed by two large stones placed one above the other, of about 5 feet in length. These have large stones placed at their ends, apparently for the purpose of keeping them in their place. The height of the door space is 5 feet 7 inches. The walls of the passage incline outwards to the height of 5 feet 4 inches. At that height the stones begin to overlap one another, until, at one place, the sides approach within little more than a foot of one another. Many large stones were taken out of the passage of a size and shape suited to cover the space between the walls thus narrowed.

At the distance of $11\frac{3}{4}$ feet from the doorway, the passage turns at right angles towards the west, and leads to a flight of eleven steps of the rudest form, the lowest step 42 inches, the highest 28 inches in breadth. These steps lead upwards to the outside of the mound. The length of the staircase passage is about 12 feet.

In clearing out this passage there were found a fragment of pottery, lathe-turned, and an iron-handled hammer, the heavy end of which is rounded off in a manner similar to those used by tinkers. These are probably the traces of some treasure-seeker of former days, who, finding the work harder than he expected, and perhaps the usquebaugh stronger, broke his "greybeard," and left his hammer behind him. These "vestiges," as well as all the other things found at Tapock, are now in the National Museum of the Antiquaries of Scotland.

The doorway was completely blocked up with rubble. We now commenced work on the top of the mound. The surface was irregular, and covered with heather, ferns, some large firs still standing, and the stumps of others which had been blown down. After the removal of an immense mass of large stones and rubble with which the chamber was filled, and which was thrown over on the east side of the mound to the amount of

upwards of 200 tons, we found ourselves in a large chamber, of an irregular circular form, 106 feet in circumference.

The floor is the solid rock (sandstone), and is inclined from N.W. to S.E. The height varies from 11 feet 4 inches on the north to 8 feet 6 inches on the south side. The floor is about 3 feet lower on the east side than at the highest part. In this portion of the floor the greater part of the smaller stone implements were found. The walls are built of large stones, irregularly but firmly built without cement of any kind. They are stained in many places with dark brown marks, as of smoke. Some of these stains, however, may have been made by the roots of the heather forcing their way down and affording a passage for water discoloured by the peaty earth on the surface.

At irregular heights and intervals in the walls there are about nineteen spaces of from 10 to 14 inches in width, and similar depth. These appear to be arranged without any order, and to have been left when a large stone afforded a good lintel or sole at a convenient distance from the ground.

These spaces are well adapted for cupboards or store places. Nothing was found in them, however, except some white clay peculiar to Torwood. The walls of the chamber have an inclination *outwards*. On the north-west there is a portion of 20 feet in length, at the height of six feet from the floor, where the upper part of the wall is put back 18 inches, thus forming a sort of shelf.¹

This change of plan appears to have arisen from the builders finding that their wall did not slope back sufficiently to resist the pressure from without, and adopting the above plan as a remedy.

On every part of the floor a great deal of charred wood was found, principally oak, I believe; and in the centre there were several large stones much discoloured. Among these stones the charcoal was in great quantity, accompanied by a great deal of a red and brown earthy substance, apparently containing much animal matter. This was apparently the fireplace. There, and in other parts of the floor, were found the teeth of a large graminivorous animal, and some small pieces of bone.

¹ Subsequent examination shows that this ledge is carried round the whole of the chamber.

On the south-east side of the chamber, and at the distance of 8 feet from the doorway first discovered, we find another doorway similarly constructed, and 3 feet in width. This doorway leads into a passage 10 $\frac{3}{4}$ feet in length, and which has a slight turn in it. This passage descends rapidly, and is 3 feet 2 $\frac{1}{2}$ inches wide at the widest part (Plate XVI. fig. 2).

We now find ourselves at what we may suppose to be the great or principal entrance. This consists of pillars roughly squared, 6 feet 4 inches in height, 18 inches thick, surmounted by rough capitals 1 foot 5 inches square, the whole thus forming side posts of 7 feet 9 inches, and surmounted by two large lintels, as in the first doorway. In the walls on the inside of this doorway there are two holes of about 6 inches square, one of which is 5 feet in depth, and the other about 18 inches. These holes have, apparently, been for the purpose of "barring" the door.

Passing through this doorway, we find ourselves in a narrow passage 9 feet in length, of similar construction to the other passage, and having, like it, a slight bend in it. This passage brings us to the outside of the mound. It terminates in an opening formed of rough stones. There is no lintel remaining, as in the other doorway. Owing to the bend in the passage, the doorway into the central chamber can only be partly seen from this last opening.

The floor of these passages is much worn, whereas the steps above mentioned bear no marks of wear and tear. From this we may infer that the lower passage was the usual one of entry into the house, while the upper or staircase one was only occasionally used, and would probably be the means of retreat in the event of the mound being attacked, and the lower doorway being forced.

The roof-stones of the lower passage are not in position, but a sufficient number of large stones to form the roof were found in clearing out the passages. These, in common with the rest of the building, were completely filled with large stones and rubble, which had almost to be *quarried* out, so compact was the mass.

The opening, or doorway last described, is nearly at the base of the mound, and opposite to it there is a corresponding opening in the wall of circumvallation. At or near this gap there are some stones of large size, and one of them, a very large block, is remarkable from having deep marks in it of an attempt to divide it. These marks are about 3 inches



Fig. 1. Interior of Chamber at Torwood.

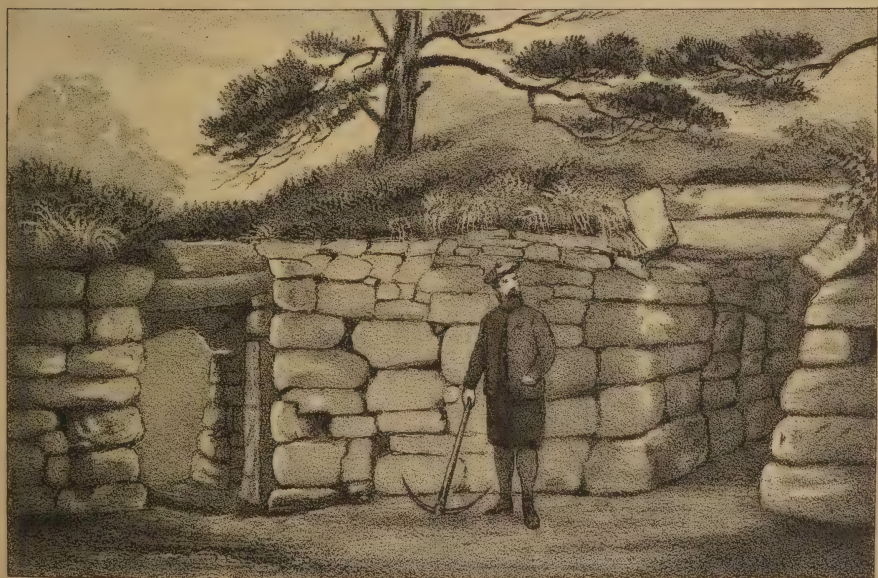


Fig. 2. Interior of the Chamber at Torwood shewing the doorways.

long and $1\frac{1}{2}$ deep. One of these incisions is at right angles to the three others, showing, apparently, that the early stone-hewer found, after he had made his first incision, that he was working against the grain of the stone.

All the stones used in the building are of the same sandstone as the rock on which the mound stands. The mound, *i.e.*, the backing of stones and earth on the outside of the walls of the central chamber, varies from 18 to 28 feet in thickness.

Below the mound, on the west and precipitous side, there is a series of caves in the face of the rock. Some of these have apparently been deepened by the hand of man; and from the largest of them a path leading up to the mound is traceable.

The sketch exhibited will convey an idea of them. They are dry, and may probably have been occupied by the builders of the mound during its erection. From the extent of the mound, and the large size of the stones, much time and labour must have been expended on it. One of these caves is now used by gamekeepers as a place of shelter and a look-out.

Near the doorway first discovered, there were found a number of egg-shaped stones of various sizes; these are principally made of a sort of plum-pudding stone. Some are apparently fashioned artificially, while others are such as are found in the bed of the Carron river. Parts of querns of a rude and primitive make were found in different parts of the floor.

Three perforated stones, when found by the workmen, were at once named by them *whorls*, and such I believe is the name given to such stones by our learned antiquaries. One of the men tells me that he remembers seeing an old woman use such an implement in spinning. Whether these stones were used in spinning or as ornaments, it is curious that such an appendage to the spindle, though of different material, is used at present in the south of France, as I had occasion to remark last year when in that country. Together with these were found a piece of rude, thick pottery, and a flat oval piece of slaty stone, perforated at the narrow end, and covered with fine scratchings. These seem to have been made with the point of a needle. It may have been worn suspended by a string from the neck of some fair aboriginal, and used by her as a needle sharpener. One implement, made either of baked clay, or of a soft red stone, is hollowed out like a cup.

There are several stones slightly hollowed out in the centre, which

may have been made use of either as small lamps or cups. One of these has a concavity on each side, but so shallow as not to be capable of holding any quantity of liquid. I would suggest that it is probable that the early inhabitants of this dwelling would probably belong to a period when paint was an important article of dress, and that this may be the dressing-case or palette of some fair Briton, the red paint being on one side, and the blue on the other.

Near the centre of the floor were found three large stones, upon which are some of those mysterious markings which have been observed in different parts of England and Scotland, and which have, I believe, baffled the skill of the antiquaries to discover the meaning of. These markings seem to have been on the stones previous to their being used in the present building, as some of the markings are broken across. This would not have been the case had the marks formed an ornament of the stonework; the stones themselves are too large to have been broken across by the falling in of the roof, on the supposition that there was a roof with a rubble backing similar to the walls. I cannot imagine how the room could have been filled with so solid a mass, except by the falling in of the roof. I would therefore suggest that the marks were on the stones before they were hewn out of the rock. I would also remark, that one of these figures, which is composed of two concentric circles, is not unlike a rude ground-plan of the mound itself and its surrounding wall, and that two breaks in their circles correspond with the entrance into the mound and the gap in the wall. It may have been the plan of the master-builder, sketched by him on the face of the rock.

On the floor of the house there were found two iron axeheads, one of them of ancient, the other of comparatively modern form. From these I would gather that the roof of the house had not fallen in for a very long period after the owners of the querns had passed away, or at least that a sufficient space was left in the interior to allow of the entrance of the curious woodman. When we remember that this mound was in the centre of a dense forest, and had nothing to distinguish it, apparently, from other eminences, we can understand how it might remain unnoticed for ages. It is only since the timber has been cleared away that the conical form of the mound is observable.

It is, perhaps, worthy of remark, that the mound commands an exten-

sive view of the Roman wall, extending from Carriden on the east to some miles beyond Castle Carey westward.

The Roman road or Camelon Causeway passes through the Torwood about 100 yards from the foot of the rock on which the mound stands.

Immediately beyond the point where this Roman road crosses the Torburn, there is a rough and rocky eminence, known in the country by the name of the Roman Camp on Carr's Hill. On this hill I have already excavated one building, similar in workmanship to that on Tapock, but with some peculiarities of structure.

A plan of this building is in the same sheet (Plate XV. figs. 7 and 8) which shows the plan of Tapock, and for which I am indebted to the kindness of the officer commanding the Royal Engineers engaged in the Government Survey.

As we hope to make further excavations at Carr's Hill, I will not enter into a description of the house there, but would merely point out an interesting feature in it, viz., that there are traces of a passage of 30 feet in length leading into it, and that for a portion of about 9 feet the large top stones are in position. One of the oldest inhabitants remembers the remainder being taken away to build a march fence. Carr's Hill is 1320 yards from Tapock.

A line drawn from Tapock to Carr's Hill, and prolonged until it cuts the hill above Sauchie, about five miles distant, will pass within a few yards of a flat-topped mound similar in shape to the one I have been attempting to describe.

I have lately visited this point, and found a mound, apparently artificial, with a precipice (the Lime Crag) of about 300 feet on the north-west side, and an entrenchment on the other side, the whole bearing a striking resemblance to the plan of Tapock.

About three miles north from Tapock there are certain grassy eminences called the Bury Hills on the estate of Polmaise. On one of them are traces of an encampment somewhat similar to that on the Sauchie Hill. Each of the three points commands a clear view of the other two, and each place possesses a most extensive view over the whole district.

Farther examination may perhaps show that these three fortified points—Torwood, Sauchie, and Bury Hills—have a further relation to one another.

IX.

NOTES ON THE SKULL FROM FYRISH, EVANTOWN. By
WILLIAM TURNER, M.B. (PAGE 233.)

This cranium, from its strong muscular ridges, the worn condition of the teeth, the obliteration of many of the sutures, the depth of the canine fossæ in the upper jaw, and the obtuse angles of the lower jaw, is evidently that of a male in the decline of life. The skull is brachycephalic and rounded in form. The various regions of the cranium are well proportioned. It is not truncated posteriorly, and does not exhibit the parieto-occipital flattening which many of the brachycephalic skulls from the ancient short cists possess, and which by some writers is supposed to have been produced by pressure artificially applied during infancy (see my Report on a Skull from Dunse, Proc. vol. v. part ii. p. 279). The cerebellar fossæ are well developed. The glabella and supra-orbital ridges are strongly marked. The nasal bones curve slightly upwards. There is no prognathism. The principal measurements are as follows:—Extreme length, 7·3; breadth (parieto-squamous), 5·9; height, 5·2. Greatest frontal breadth, 4·8; parietal, 5·85; occipital, 4·1. Fronto-nasal radius, 3·6; maxillary, 3·5; frontal, 4·5; parietal, 4·95; occipital, 3·9. Longitudinal arc, 15·2; frontal, 5·0; parietal, 5·2; occipital, 5·0. Frontal transverse arc, 12·5; parietal, 14·0; occipital, 11·4. Horizontal circumference, 21·3. Internal capacity, 98 cubic inches. Ratio of length to breadth, 100 to 80·8; of length to height, 100 to 71.

PROCEEDINGS

OF THE

SOCIETY OF ANTIQUARIES OF SCOTLAND.

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EIGHTY-SIXTH SESSION, 1865-66.  
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ANNIVERSARY MEETING, 30th November 1865.

JOSEPH ROBERTSON, Esq., LL.D., Vice-President, in the Chair.

The Office-bearers of the Society were elected for the Session as follows:—

Patron.

HER MAJESTY THE QUEEN.

President.

THE DUKE OF BUCCLEUCH AND QUEENSBERRY, K.G.

Vice-Presidents.

Hon. Lord NEAVES, LL.D.

Professor JAMES Y. SIMPSON, M.D.

DAVID LAING, Esq., LL.D.

Councillors.

GEORGE PATTON, Esq. }
FRANCIS ABBOTT, Esq. }

*Representing the
Board of Trustees.*

ADAM SIM of Coultermains, Esq.

Rev. THOMAS McLAUCHLAN, LL.D.

JAMES T. GIBSON CRAIG, Esq.

Professor COSMO INNES.
 JAMES D. MARWICK, Esq.
 JOSEPH ROBERTSON, Esq., LL.D.
 Colonel JOSEPH DUNDAS of Carronhall.

Secretaries.

JOHN STUART, Esq., General Register House.
 JOHN ALEXANDER SMITH, M.D.
 DAVID LAING, Esq., LL.D., for *Foreign Correspondence*.

Treasurer.

THOMAS B. JOHNSTON, Esq., 4 St Andrew Square.

Curators of the Museum.

JAMES DRUMMOND, Esq., R.S.A.
 ROBERT CARFRAE, Esq.

Curator of Coins.

GEORGE SIM, Esq.

Librarian.

JOHN HILL BURTON, Esq., LL.D.

Auditors.

ALEXANDER BRYSON, Esq.
 DAVID DOUGLAS, Esq.

WILLIAM T. M'CULLOCH, *Keeper of the Museum*.
 ROBERT PAUL, *Assistant*.

The Chairman stated that the Society had lost by death eight Fellows during the past year, viz. :—

	Elected
DANIEL FISHER, Esq., Writer to the Signet, . . .	1827
GEORGE LORIMER, Esq., Builder, . . .	1849
DAVID MACLAGAN, M.D., . . .	1826

	Elected
Colonel Sir WILLIAM A. MAXWELL, of Calderwood, Bart., . . .	1828
JOHN M. MITCHELL, Esq., Belgian Consul-General, and Joint- Foreign Secretary, Mayville, Leith,	1840
Professor WILLIAM RAMSAY, Glasgow,	1856
ALEXANDER WHITE, Esq., Leith,	1848
JOHN GEORGE WOOD, Esq., Writer to the Signet,	1852

During the past year, twenty-three Fellows have been admitted; and four have forfeited their rights of membership by falling into arrear.

There are at present on the roll 291 Fellows.

The decease of three of the HONORARY MEMBERS had also taken place during the same period, viz.:—

1. JAMES SKENE of Rubislaw, Esq., who died at Frewen Hall, Oxford, on the 27th March 1864, at the patriarchal age of 90. He was elected in 1844 an Honorary Member in acknowledgment of important services rendered to the Society, having been an Ordinary Fellow since May 1818.

2. ALGERNON, fourth DUKE OF NORTHUMBERLAND, K.G., who died at Alnwick Castle, on the 12th of February last, aged 72. He early distinguished himself by his antiquarian researches in the East; and, as Lord Prudhoe, was added to the list of our Honorary Members in February 1824, on the same day with his elder brother, Hugh, third Duke of Northumberland, whom he succeeded in 1847.

3. CHRISTIAN J. THOMSEN, Conferenzraad, Director of the Royal Danish Museum of Antiquities, Ethnography, &c., at Copenhagen. He was admitted an Honorary Member in 1851, and died, at an advanced age, on the 21st of May 1865.

To supply the vacancies thus occasioned,

The Most Noble the MARQUESS CAMDEN, K.G., President of the
Archæological Institute, London,

Sir HENRY DRYDEN, Bart., Canons Ashby, Northamptonshire,

BENJAMIN THORPE, Esq., Chiswick, near London,

upon the unanimous recommendation of the Council, were duly elected to fill the vacancies in the list of the HONORARY MEMBERS OF THE SOCIETY.

A ballot then took place, and the following gentlemen were elected
FELLOWS OF THE SOCIETY :—

THOMAS S. ANDERSON, Esq., Lindores Abbey, Newburgh.

REV. GEORGE W. BRACKENRIDGE, Clevedon.

JAMES COWAN, Esq., Glen Esk House.

GEORGE CORSANE CUNINGHAME, Esq., Manor Place.

ANDREW GIBB, Esq., Aberdeen.

ROBERT KAYE, Esq., Fountain Bank, Glasgow.

DAVID LYELL, Esq., Writer, Edinburgh.

Also, as CORRESPONDING MEMBERS :—

ALLAN BELL, Esq. of Abbots Haugh, Falkirk.

W. H. JAMES WEALE, Esq. of Bruges.

JAMES T. IRVINE, Esq., Architect, London.

The SECRETARY, Mr STUART, then read the following statement relative to the Museum and Library :—

“NUMBER OF VISITORS TO THE MUSEUM FROM 1ST DECEMBER 1864 TO
31ST OCTOBER 1865 :—

	Week Day.	Sat. Evening.	Total.
1864. December, . .	9,006	508	9,514
1865. January, . .	16,511	673	17,184
... February, . .	2,875	450	3,325
... March, . . .	3,940	572	4,512
... April, . . .	3,996	703	4,699
... May, . . .	6,822	580	7,402
... June, . . .	5,127	820	5,947
... July, . . .	10,025	1,352	11,377
... August, . . .	12,403	1,817	14,220
... September, .	10,705	1,560	12,265
... October, . .	4,617	873	5,490
... November,*
* (Shut for Cleaning).	86,027	9,908	95,935

“The corresponding numbers for the year ending 31st October 1864 were—Day, 84,195; Saturday evenings, 9,050; total, 93,245; being 2690 less than the number of visitors during the year just ended.

"The donations to the Museum and Library were 265 articles of antiquity, 37 coins and medals, 151 volumes of books and pamphlets. Thirty articles of antiquity, 10 coins and medals, and 14 volumes of books, were purchased.

"The donations to the Museum and Library for the year ending 31st October 1863 were 301 articles of antiquity, 140 coins and medals, and 104 volumes of books.

"515 copies of the Catalogue of the Museum were sold during the year."

(The various donations here referred to have already been specially described in the Proceedings.)

MONDAY, 11th December 1865.

JOSEPH ROBERTSON, Esq., LL.D., in the Chair.

The following Gentlemen were balloted for, and elected Fellows of the Society:—

THEODORE AUFRECHT, M.A., Professor of Sanscrit, University, Edinburgh.

WILLIAM TROUP, Esq., University Library, St Andrews.

WILLIAM TURNER, M.B., Demonstrator of Anatomy, University, Edinburgh.

The Donations to the Museum and Library were as follows, and thanks were voted to the Donors:—

(1.) By JOHN GORDON of Cluny, Esq.

Bronze leaf-shaped Sword, in fine preservation, with distinct thin projecting bevelled edge or border. It measures 39 inches in length, its greatest breadth being 2 inches. The handle-plate measures $4\frac{1}{2}$ inches in length, and is pierced with four holes for rivets. It was found in South Uist, one of the Western Islands.

(2.) By Mr DAVID BENNET, Abernethy, through Alexander Laing, Esq., Newburgh, Fifeshire, F.S.A. Scot.

Bronze leaf-shaped Sword, measuring 25 inches, a small part of the point being broken off. The handle-plate is $4\frac{1}{2}$ inches in length, and is

pierced with eight rivet holes, six of the bronze pins or rivets for fixing the handle still remaining. It was fished up from the river Tay near Elcho, in the parish of Rhynd, Perthshire.

Iron Dagger Blade, much corroded, measuring $10\frac{1}{2}$ inches in length, and 1 inch in greatest breadth. Found in the river Tay near Inchyra Ferry, parish of Rhynd, Perthshire.

(3.) By WILLIAM BUTTER, Esq.

Iron Spear Head, much corroded, measuring 9 inches in length, with a socket for shaft. Found in trenching at Ballintuim, Perthshire.

(4.) By Mr MOFFAT, Gardener, Aytoun Castle, through D. Milne Home, Esq., F.S.A. Scot.

Globular-shaped Bottle of coarse green-coloured glass, $7\frac{1}{2}$ inches in height; and the Circular Foot of a Crystal Wine-Glass, $2\frac{3}{4}$ inches in diameter, partially opaque from decay. Found 15 feet below the surface, on which trees were growing upwards of 150 years old; near Aytoun Castle, Berwickshire.

Splinter of Cannel Coal, and rounded fragments of Bituminous Shale, found from 5 to 8 feet from the surface in a bed of sea-sand, below regularly stratified beds of undisturbed gravel.

Mr Milne Home states that "there are now no beds of cannel coal or shale in natural position nearer than Mid-Lothian, viz., on high ground which runs from Prestonpans to Dalkeith. The shape of the cannel coal suggests the inquiry, whether, before being drifted with the shale, it had not been shaped by human hands."

(5.) By DAVID R. ROBERTSON, M.D., F.S.A. Scot.

Two Lances, with four-edged iron heads; measuring 9 feet long.

Two Halberts, with iron heads; measuring 7 feet in length.

Two Boar Spears; one with a two-edged head, the other with a pointed head.

Two Iron Gauntlets.

Breast and Back Plates of a Corselet.

Six Swords; three with basket hilts.

Algerian Musket or Fowling-piece; length of barrel, 3 feet 7 inches.

Pair of Ship Pistols, with flint locks.

Two Steel Helmets, of the Life Guards, with brass mountings.

Cartridge Box of the old "Trinity House Volunteers," Leith.

Wooden Canteen, 7 inches in diameter, used during the Crimean War.

Dagger, with three edges, measuring 11 inches in length; the handle, of deer's horn, measures $4\frac{1}{2}$ in length.

Two Cocked Hats of the Edinburgh Town Guard; one of the hats has three corners, and the other two points or corners. The old City Guard was disbanded in 1817.

Two Malay Cresses. The blades measure 14 inches, and 16 inches in length.

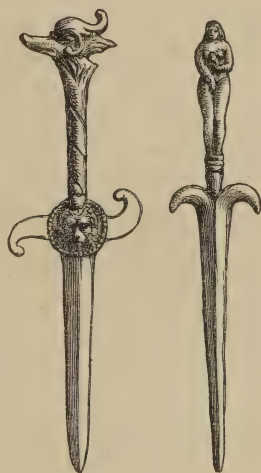
Two Indian Swords; one, with a broad blade, measures 16 inches, the other 18 inches in length.

Two Clubs and a Paddle, richly carved, from the South Sea Islands.

Club, with a row of shark's teeth fastened along each of its edges. From the South Sea Islands.

(6.) By B. H. HOSSACK, Esq.

Four specimens of the spurious Bronze Daggers, recently procured in London, stated to have been found in the bed of the Thames in the course of operations for forming the Thames embankment. (See the annexed woodcut, which gives figures of two of them.)



Spurious Bronze Daggers.

(7.) By the Rev. J. M. JOASS, Eddertoun, Corr. Mem. S.A. Scot.

Small Sandstone Whetstone, measuring 3 inches in length, and about 1 inch in breadth, and an irregularly-shaped piece of pumice-stone, 3 inches in its greatest diameter. The whetstone was found in a "Pict's" or "Eirde-house" in Strathnaver, Sutherlandshire, in the immediate neighbourhood of which the pumice-stone was also found.

(8.) By ADAM SIM, of Coultermains, Esq., F.S.A. Scot.

Communion Token of the Collegiate Church of Biggar, square-shaped, in lead, with a view of the church on one side, and on the other "BIGGAR KIRK, 1759."

(9.) By THOMAS PURDIE, Esq., George Street.

Small Terra Cotta Jar, with handle, from Perugia. Inscriptions are scratched along each side of the jar.

(10.) By the late HENRY CHRISTY, Esq., through John Evans, Esq., F.S.A.

Three large chipped portions of Yellowish Flint, measuring from 10 to 12 inches in length by 3 to 4 inches in breadth, two of them being chipped to a point at one extremity. Also four flint Chips or Flakes, from 3 to 5 inches in length by 1 to 2 inches in breadth, being specimens of worked Flints, found at Pressigny le Grand, France. Mr Evans, in his communication, says,—

“This town is situated about thirty miles to the south of Tours, on the river Claise, an affluent of the Creuse, in the department of Indre et Loire. The peculiar worked flints are most abundant at a farm called La Claisiere, rather more than two miles from Pressigny, and on the opposite side of the Claise. The soil is a red loam, of probably miocene age. In some places whole fields of this loam were replete with worked flints, and the large specimens which, from their resemblance to pounds of butter, have received from the peasants the name of *livres de beurre*, were very abundant, notwithstanding that whole cartloads of them had been collected at the farm-house and some neighbouring cottages; and the soil teemed with flakes, mostly broken, and with splinters of flint. Near the farm, in a road section, a bed of flakes was to be seen at a depth of about two feet from the present surface; and as far as could be judged, worked flints abounded in the soil in every direction, even below the depth of the present cultivation.”

(11.) By Mr JAMES ROBERTSON.

Stone Chisel or Celt, of a fine grained greenstone or jade; it measures 4 inches in length, and $1\frac{1}{2}$ inch across the face. From New Zealand.

(12.) By Colonel JAMES A. ROBERTSON, F.S.A. Scot. (the Author.)

Historical proofs respecting the Gael of Alban; or, Highlanders of Scotland as descended of the Caledonian Picts, &c. Small 8vo. Edinburgh, 1865.

(13.) By the ANTHROPOLOGICAL SOCIETY OF LONDON.

Memoirs read before the Anthropological Society of London, 1863-4. 8vo., Vol. I. London, 1865.

Lectures on Man; his Place in Creation, and in the History of the Earth. By Dr Carl Vogt; edited by J. Hunt. 8vo. London, 1864.

Lake Habitations and Pre-historic Remains in the Turbaries and Marl Beds of Northern and Central Italy. By B. Gastaldi. Translated by C. H. Chambers. 8vo. London, 1865.

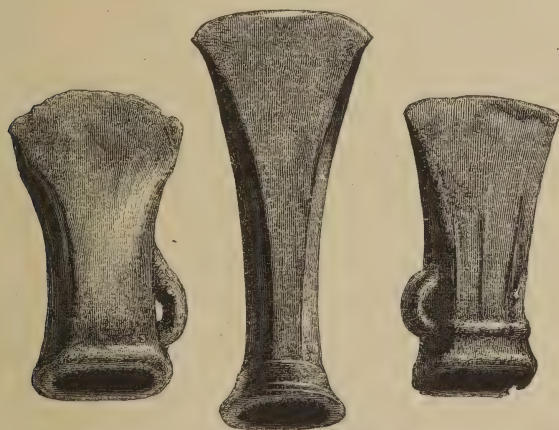
On the Phenomena of Hybridity in the Genus Homo. By Dr P. Broca. Edited by C. C. Blake. 8vo. London, 1864.

The Anthropological Treatises of J. F. Blumenbach. Translated and edited by T. Bendyshe. 8vo. London, 1865.

There was exhibited by JAMES HAY CHALMERS, Esq., F.S.A. Scot.—

A small Bronze Sickle, found in trenching in the parish of Alford, Aberdeenshire.

Three Bronze Celts, purchased for the Museum by the Society.



Bronze Celts found near Bell's Mills, Edinburgh.

These Bronze Socketed Celts, measuring from $3\frac{1}{2}$ to 5 inches in length, and 2 inches across the face, were found 12 feet below the surface,

in digging at the Water of Leith, near Bell's Mills; five of them were found together embedded in the clay. Near them were two large boulders. The section of the cutting showed 5 feet of sand, 2 feet of gravel, and 5 feet of blue clay. (See the annexed woodcut.)

Other three celts were also found near the same place.

The following Communications were read :—

I.

ACCOUNT OF THE OPENING OF A CAIRN ON THE ESTATE OF PIT-
TODRIE, ABERDEENSHIRE. BY CHARLES E. DALRYMPLE, Esq.,
F.S.A. Scot.

The hill of Knockolochie, where this excavation took place, rises abruptly from the vale of the Urie, near the centre of the district of "the Garioch." The name is said by Celtic scholars to signify "the hill of crying," or "of lamentation;" and this, coupled with the fact that several cairns lie hidden amongst the woods which clothe the slopes, while another, not yet examined, crowns the summit, is suggestive of ancient conflict, or at least of death and sepulture.

Lieut.-Col. Knight Erskine of Pittodrie, the proprietor, believing that these monuments were probably sepulchral, decided on investigating one of them, and lately accomplished the exploration, accompanied by the writer of these notes, and one or two other friends.

The cairns are much of the same character, being of scanty elevation in proportion to their circumference, and so moss-grown as to blend with the ground around them almost indistinguishably.

The cairn chosen for examination was 40 feet in diameter, but only $3\frac{1}{2}$ feet above the surface of the ground. It was decided to try the centre. On removing the mossy turf the workmen came to small stones, with mould between, but as they penetrated deeper they found them of a larger size—those at the bottom, which lay on the original surface of the ground, requiring two men to lift them. On reaching the bottom the earth showed a yellow colour, with pieces of charcoal intermixed, proving to those experienced in such researches that a sepulchral or sacrificial deposit existed. On further examination it proved that a hole

had been dug in the subsoil, in which a large baked clay urn was placed, mouth downwards, on the subsoil rock, which had been laid bare to receive it, the hole being then filled in with the yellow earth, closely packed round the urn, the bottom of which was by this arrangement uppermost, and had a small flat stone laid upon it. The urn proved to be about half-full of incinerated bones, apparently human, and was got out in fair preservation, considering its size and imperfect manufacture, being somewhat soft and spongy in texture. Its dimensions proved to be, 16 inches in height, and 12 inches across the mouth. It was ornamented with a Vandyke pattern round the upper part, just below the brim. The yellow earth which surrounded the urn appeared to have been calcined, and crumbled in the hand like chalk-powder. It had been sifted, or in some way freed from foreign matter, excepting three fragments of stone, which lay embedded close to the urn, and seemed to the finders to have been placed there designedly. They were—1st, A piece of serpentine or other greenstone, flattened on one side, and marked as if the points of weapons had been sharpened on it; 2d, A piece of flint, from which flakes had been struck, and which looked as if it had been the intention to make it into an arrow head, but had proved a failure; 3d, A small stone, 4 inches in length, bearing a remarkable, though apparently natural, resemblance to a miniature “celt” or axe head. The question suggests itself, were these stones placed there intentionally, and, if so, as appears most probable, were they intended to represent the weapons of the deceased—the survivors being unwilling to part with the originals, from their scarcity and consequent value? If this be the explanation, it indicates a degree of barbarism and poverty of resources which throw back the period of these cairns to a very remote date. The whole of the rest of the cairn was carefully examined, but no traces found of any further deposit. A raised ridge which ran round the top, about half-way between the centre and circumference, and which was principally composed of large stones placed upright, and reaching from the bottom of the cairn to a little above its general surface, was expected to yield some remains, as in the case of a similarly-shaped cairn in the Alford district, explored by Mr John Stuart, our Secretary, and some friends, last year; nothing, however, was discovered.

While the secrets of the cairn were being laid open, several trains of the Great North of Scotland Railway, which skirts the base of the hill, passed in both directions. The savage barbarism of the dark ages was thus brought face to face, as it were, with the enlightened civilisation of our own, and the effect was most striking and suggestive.

Mr STUART drew attention to the varieties of the modes of interment recently communicated to the Society, and to the value of every additional discovery as widening the basis of ultimate induction.

Dr JOSEPH ROBERTSON made some remarks on the so-called Periods of Stone, Bronze, and Iron, of the Danish antiquaries, and held that they were untenable in the strict sense of their originators.

The Rev. E. L. BARNWELL, Secretary of the Cambrian Archæological Association, took the same view, and gave instances of interments by burning and inhumation in monuments of the same character and period, which on the Danish theory would have to be ascribed to different times.

II.

NOTICE OF RECENT EXCAVATIONS IN CHEDWORTH WOOD, ON THE ESTATE OF THE EARL OF ELTON, IN THE COUNTY OF GLOUCESTER. BY JAMES FARRER, ESQ., HON. MEM. S.A. SCOT. COMMUNICATED BY JOHN STUART, ESQ., SEC. S.A. SCOT.

The discovery of Roman villas in these woods originated with an under gamekeeper, engaged in ferreting rabbits, and was first brought under my notice in June 1864, when a small chamber was cleared of rubbish, but the tessellated pavement was found to be almost entirely destroyed. It had been laid on flags, placed over buttresses of stone, forming narrow passages, in which many of the loose tesserae were found. This chamber was 17 feet long, and 13 feet wide. The passages were about 1 foot wide, and 3 feet deep. Further examination led to the discovery of loose tesserae, painted stucco, burnt stone, brick, and ornamental tile, and, finally, the walls of the ancient building. Up to the present time, the area of ground already explored is about $2\frac{1}{4}$ acres, independent of

more recent discoveries in other parts of the wood. Villas Nos. 1 and 2 stand at right angles to each other, and occupy a sheltered position, commanding a good view of the narrow but well-timbered valley of the Coln. Villa No. 1 faces the east, villa No. 2 the south. The ground has been covered with wood from time immemorial, and the underwood is felled about every twenty years. No suspicion of buildings seems to have been entertained, though in some places the top stones of the walls appeared, on close examination, above the surface of the ground.

Villa No. 1 had been built in the form of two sides of a square, looking east and north, with possibly a court-yard or garden within. Along the side, looking eastwards, runs a corridor, about 133 feet in length, and 9 feet in width. Two short flights of steps, much worn, lead from this corridor into various rooms, many of which, as well as the corridor itself, contain ornamental pavement. Twenty chambers or passages have been excavated, exclusive of the bath at the north end of the corridor, immediately behind which is a hypocaust in a tolerable good state of preservation. Ten of these rooms are on the south side of the square, and are inferior in character to those on the west side. Most of the rooms on the west side had been paved with *tesseræ*, set in mortar. The largest room was 28 feet 9 inches long, and 18 feet 6 inches wide. It had been warmed by flues inside the walls. The furnace at the south end was filled with ashes and rubbish. Many fragments of pillars, stone easing-troughs, worked stones, and hexagonal roofing-slates, many of them still retaining large flat-headed nails, of course much corroded, were dug out of the ruins. Behind room 1, villa 1, a small recess, measuring 4 feet 4 inches by 2 feet 5 inches, contained fragments of two small stone statues, the sandalled feet of which were attached to the pedestal. The discovery of the Christian monogram—the CHI RHO—in another part of the ruins is, in the opinion of the Rev. S. Lysons of Hampsted Court, an indication of the former inhabitants having embraced Christianity. This opinion, however, may be modified by the discovery, subsequently, of a small altar, at the south-west corner of a chamber, containing an octagon reservoir, about 2 feet 9 inches deep, and capable of holding nearly 1100 gallons. A drain, 11 feet in length, conducts the water from a small spring, issuing out of the natural ground. A lead pipe carried away the water from the reservoir into a small trough, 15½ inches long by 13 inches in width,

and $9\frac{1}{2}$ inches in depth, and from thence, through a drain at the south-east corner, underneath a buttress of stone, about 3 feet 6 inches square, where it appears to lose itself in the ground. Portions of coloured stucco yet adhere to the walls of this chamber. At the north end of the corridor before mentioned is a bath, 7 feet 2 inches long by 5 feet 4 inches wide, and 4 feet 4 inches in depth; the water was carried off by a lead pipe, which still remains in the wall, into an open stone drain crossing the corridor. Near the bath was a circular place like a well, but only a foot deep; it was 4 feet wide, and 2 feet 10 inches long. Behind the bath is a hypocaust in tolerable preservation; it is 21 feet long, and 18 feet broad. The pilæ on which the floor of the room was laid were 3 feet high. The bottom tile of each pila was 13 inches square; on this were placed ten other tiles, $8\frac{1}{2}$ inches square. The covering tile was 13 inches, and the cap tile 18 inches square, and over all about 4 inches of concrete, in which the tesserae were set. The space between each row of pilæ was 15 inches wide, and tile flues in the walls conveyed the hot air into the room above.

Villa No. 2 stands almost at right angles to villa No. 1. Twenty-three rooms or passages have been opened out, though some of them may perhaps be more correctly described as baths, or possibly ovens. A corridor runs in front of all, as in villa 1. It is nearly 300 feet long, and 10 feet 3 inches wide; it may, however, extend still further in ground not yet excavated. This corridor, as well as many of the rooms, has been paved with tesserae; they are inferior in character to the pavement of villa 1. The pilæ are of single stones. The swimming bath is 12 feet by $10\frac{1}{2}$ feet. On each side of it is a small bath. These are approached by passages 6 feet long, the whole facing a mortared court, 20 feet square. A lead pipe, 20 inches long, and $8\frac{1}{2}$ inches in circumference, took the water from the swimming bath into the small bath on the east side. There is another pipe, apparently of similar dimensions, still in the wall between the swimming bath and the small one on the west side. A hollowed stone drain runs behind several of the rooms. Ten of them are 24 feet 6 inches long, and vary in width from 9 to 24 feet. One is of pentagonal shape, and underneath it are stone drains large enough to admit a boy. No similar drains have been elsewhere discovered about these buildings. Many of the rooms had been paved, and warmed in the usual manner. The whole

has, apparently, been destroyed by fire. In one room a mass of molten lead was found; it weighed 67 lb., and had evidently poured off the roof of the building into a hollow place; and one of the large slates falling on it gave it the flattened appearance which it now presents. The interior of the rooms had been in most instances, possibly in all, plastered with mortar and painted. In one there was a rude cross and other marks on the wall. The colour had been red, but was much faded.

A limekiln, 9 feet deep and 10 feet wide, was found in the wood, behind villa 2. Fragments of cornices and other worked stones were dug up; they were partially calcined.

Future excavations may possibly render the task of assigning a definite period for the destruction of the villas more easy. Fire was probably the chief agent; and the absence of articles of intrinsic value justifies the presumption, either that the inhabitants had time to remove their property, or that the place was pillaged before destroyed. Mr Lysons is disposed to think that it was originally the palace of Arviragus, king of the Dobreni (Gloucester),—more than a century ago a bath, the tiles of which were all stamped with the word *Arviri*, was found in the neighbourhood,—that it was subsequently occupied by another British king, *Praciatigus* (a stone bearing this name having been found in the ruins), who married Queen Boadicea, and that finally, after its destruction¹ by the Romans, it was occupied by some officer in command of the troops.

A descriptive catalogue of the various things found amongst the ruins would swell this paper to an inordinate extent. They were of stone, bone, iron, and bronze, pottery and coins. Remains of domestic animals were abundant, comprising horse, ox, sheep, and pigs, and also fragments of antlers of a large species of red deer, but they were generally in a decayed state. Large oyster shells were also mixed up with the debris. With the exception of two pieces of skull, found in separate places, no human remains have as yet been discovered.

The stone objects comprised fragments of pillars of various sizes, from between 5 and 6 feet down to a few inches, bases of columns, hexagonal tiles, steps, stone pilæ, and troughs; also stones with the *Chi Rho* or *Laborum* inscribed.

¹ Tacitus speaks of the laying waste the territory of *Praciatigus*.

Amongst those of bone were hair-pins, bodkins or needles, knife-handles, perforated discs, and some that are difficult to describe.

Iron and bronze implements were more abundant. Of the former were knives, horse-shoes, rings, a spoon, cup, chisels, spear or lance heads, and many miscellaneous articles; also three pigs of iron, the largest of which was 5 feet 4 inches long, and 10 inches thick. Of the latter, fibulæ, pins, spoons, needle, buckles, armlets, plain and ornamented finger-rings, twisted chain with swivel (possibly a bracelet), plates of bronze, punctured and ornamented, a stylus, steelyard with leaden weight attached, and other miscellaneous articles.

The pottery was generally in small fragments. It consisted of amphoræ, and vessels of different sizes, and probably for domestic purposes. Much of it was of a very coarse description. There were, however, some specimens of Samian ware, representing hunting pieces, and some that had been broken, and rivetted with lead. On one was the maker's name—*GENIALIS F*—(broken off); also a piece of a perforated vessel, like the rose of a water-pot.

Of the articles coming under the head of miscellaneous, the most interesting is a silver spoon, $2\frac{1}{2}$ inches long, and $1\frac{5}{8}$ inch wide, with an arched swan's head handle, $1\frac{1}{2}$ inch long. The words "*CENSORINE GAUDEAS*" are inscribed inside. Mr Franks considers that it belongs to the third or fourth century, and is very rare. It was found in a mass of rubbish behind villa 1. A perforated plate of lead $5\frac{1}{2}$ inches in diameter, a lead vessel like an inkstand, fused lumps of lead, bracelet of Kimmeridge clay, large tusks of wild boar, and roebuck horns, were also found, together with fragments of glass in small quantities.

Two hundred and fifty-seven bronze or copper coins have been collected up to the present time. The majority of them belong to the Constans and Constantine family and Tetricus. Many of them are much defaced. Amongst the best preserved are those of Antoninus Pius, Victorinus, Allectus, Magnentius, and Valentinian. Only two silver coins have been found. They are both well preserved. One of them has the words "*IMP. CÆS. MAUR ANTONINUS AUG. REV: MARETA AUG.*"

Partial excavations have been made in other parts of the same woods. There is reason to believe that they will prove highly interesting. In one place, discovered in opening out a quarry, a large platform of stones

of four courses, rising one above the other, and of quite Cyclopean character, has been laid bare. Hypocaust tiles, several of them having the impression of the feet of animals—deer, sheep, dog, &c., and one with human finger-marks; also remains of pillars, and very large worked stones. A human jaw-bone, in which were two teeth, was found here. Traces of buildings not yet examined are to be seen at a distance of 200 yards higher up in the wood.

The "Capitol."—Only a few hours' labour have been devoted to this place, which was discovered the day before I left the county. It is distant about 170 yards from villa 1. Several small rooms were partially cleared, in one of which was found a stone, pronounced by Mr Lyrons to be "probably the centre compartment of a mortuary columbarium." The upper part of it, which is rather elaborately worked, seemed to have been intended to represent a scallop shell. A few coins, many hexagonal tiles, and fragments of pillars, justify the inference that a building of some importance has also existed in this part of the wood.

It is my intention to proceed with the excavations in all these places next summer. The pavement, wherever practicable, has been preserved, as also the walls of the chief rooms. Any things worth keeping will be deposited in the Museum now building in the wood.

As bearing on the interesting subject of Mr Farrer's communication, Mr STUART read a memorandum, communicated by Miss Hope Vere of Craigiehall to Professor Simpson, giving details of the discovery of another Roman villa at Seavington, the property of Earl Poulett in Somersetshire. As in the case of the other villas, the rooms had been paved with tesserae, of which specimens sent by Miss Vere were examined, as well as bits of the painted stucco of the walls.

III.

NOTES RELATING TO MRS ESTHER (LANGLOIS OR) INGLIS, THE CELEBRATED CALLIGRAPHIST, WITH AN ENUMERATION OF MANUSCRIPT VOLUMES WRITTEN BY HER BETWEEN THE YEARS 1586 AND 1624. BY DAVID LAING, ESQ., SEC. F.S.A. SCOT.

The name of ESTHER INGLIS is well known, and the number of volumes which were written and ornamented by her, from the great beauty of their penmanship, excited the unbounded admiration of her contemporaries. Some of these manuscripts were exhibited at recent meetings of the Archæological Institute, and attracted considerable notice. It occurred to me that a notice of her life, and a list of her MSS., might not be without interest to the members of that or other kindred Societies. I have therefore brought together and put in chronological order occasional notes of her MSS. made from time to time, accompanied with various particulars of her history hitherto unnoticed.

The earliest account of Esther Inglis is contained in "Memoirs of several Ladies of Great Britain, who have been celebrated for their writings or skill in the learned Languages, Arts, and Sciences," by George Ballard, of Magdalane College, Oxon. (Oxford, 1752, p. 267, 4to). From this work the notices contained in Chalmers's Biographical Dictionary, Harding's Biographical Mirrour, vol. iii., and in other similar works, are derived.

In all these notices little information regarding her history is furnished, and Ballard, misled by her retaining her maiden name, supposed that she remained unmarried till she was about forty.

In a communication to the Society of Antiquaries of London, by R. R. Holmes, Esq., respecting some of Esther Inglis's manuscripts, he says,¹ "Of her history a few particulars may be gleaned. There is in the Sloane collection in the British Museum, a little MS., entitled, 'Livret contenant diverses sortes de lettres escrit a Lislebourg, par Esther Langlois, Françoise, 1586;' and on the fly-leaf of the volume is this note, 'The father and mother of this young maid that wrote this booke suffer'd martyrdom in France, as may be seen in the Book of Martyrs. The Latin of her Psalms is (I believe) of her own making, for it is neither in Buchanan's nor any other of those who have paraphrased the Psalms.'

¹ Proceedings of the Society of Antiquaries, vol. i. second series, p. 312.



From a Drawing by Herself, in the Bodleian Library.

For the support of this assertion of the martyrdom, however, I cannot (says Mr Holmes) find sufficient authority, beyond the fact that Jean L'Anglois, a minister, was martyred at Lyons in 1572; the internal evidence, moreover, afforded by the volume itself seems to give it contradiction, for at the end is a distich which runs thus—

Filia me scripsit mandate utroque parente,
Exilii calame tædia discutiens;

from which it is not unreasonable to infer that both her parents were then living as exiles in Scotland, whither they had fled from the religious persecutions in France, and that the young Esther, then in her fifteenth year, had written the contents of the book as a sort of exercise. She probably changed her name from Langlois to Inglis, to suit her Scottish domicile."

According to her own words, 'Esther Langlois,' 'Anglois,' 'Anglus,' or as she is better known by the adopted name of Inglis, was a native of France, and born in the year 1571. Her father, Nicholas Langlois, and her mother Marie Prisott, with their infant children, were among the French refugees who fled to this country after the atrocious St Bartholomew massacre of the Protestants 24th August 1572. That they were related to the Protestant minister, Jean Langlois, who perished at Lyon, is highly probable. The following extracts from the Treasurer's Accounts show that a few years later Nicholas Langlois, with his family, had come to Edinburgh, where he found encouragement as Master of the French School in this city:—

1578-9 March.

Item to Nicholas Langloys Francheman and Marie Prisott	
his spous for thair help and releif of sum debt contractit	
be thame in the zeir of God 1578	£70 0 0

1580 July.

Item to Nicholas Langloys Francheman and Marie Prisott	
his spous	£80 0 0

1581 July.

Item to Nicolas Langloys Francheman, Master of the	
French scole, conforme to his Mat ^{ties} precept	£80 0 0
In the years 1582, 1583, 1584, and 1585, he also	
received his pension at Whitsunday term of	£50 0 0

The name of Langlois in France still continues. At that time "Pierre L'Anglois Escuyer, Sieur de Bel-Estat," was the author of a somewhat learned but pedantic work, entitled, "Discours des Hiéroglyphes Ægyptiens, Emblèmes, Devises, et Armoirées. Ensemble liiii. Tableaux Hiéroglyphiques pour exprimer toutes conceptions à la façon des Ægyptiens, par figures," &c., Paris, 1583, 4to. In an interesting Album, kept by Sir Michael Balfour of Burleigh, towards the end of the 16th century, occurs the name of one who was, most likely, Esther's brother. It consists of four lines of Latin verse, with his autograph, "David cognomento Anglus, natione Gallus, et educatione Scotus." The arms on the shield may be described—a shield, *argent*; an incressent, *gules*; crest, five lilies *proper* placed side by side; with the motto *Dum spiro, spero*.¹

Of the subsequent history of Nicholas Langlois, who survived till 1611, we find from the Register of Confirmed Testaments in the Commissariat of Edinburgh, that "Nicholas Inglis, Frenchman, Master of the Frenche Schole in Edinburgh," died on the 10th of August 1611; and Mary Preset is named as his relict spouse. His Testament was confirmed by the Commissaries of Edinburgh, 23d July 1614. It is written in French, he styling himself "Nicholas Langlois, François, Maistre de lescole François en ceste ville de Lislebourg." By this deed he appoints his wife Marie Preset, and their daughter Marie Inglis, to be his executors. It makes no mention of Madame Esther, then settled with her husband in Essex, as probably less dependent than her sister Marie.

But before proceeding to enumerate the MSS. volumes written by Esther Inglis, some notice may be taken of her marriage with Bartholomew Kello. This must have been some time about 1596, she herself still continuing (as seems to have been customary at that time) to retain the use of her maiden name.

The first thing to be noticed, connected with her husband's parents, was an event of a most tragical nature.

Mr John Kello, was educated at St Andrews, where he took his degree of A.M., and was one of those recommended by the General Assembly in December 1560, as qualified for the ministry. Soon after this he

¹ In the library of the Marquess of Lothian, Newbattle Abbey.

became the first Presbyterian minister of the parish of Spott, in East Lothian. He married a Margaret Thomson, by whom he had one son and two daughters. On Sunday morning, the 24th September 1570, tempted, he says, by the suggestions of the evil spirit, and not from any personal dislike, he strangled his wife; and to make it appear as if it were her own deed he hung her up, and having made fast the doors of the house, he actually proceeded to the church and preached as if nothing had occurred. At the end of the service, he asked some of his hearers to go with him to the house to inquire for his wife, who, he said, had been complaining; the doors being fastened, on breaking them open they found her dead. Kello's character prevented at first any suspicions being attached to him, with the exception of one of his neighbours, the minister of Dunbar, to whom he had previously communicated some strange dreams. Before long, remorse on account of his atrocious deed, led him to make a full confession; and upon this he was brought to Edinburgh, tried, and condemned to be hanged, and his body burned to ashes. This sentence was carried into execution on the 4th of October 1570.

Such an event naturally created a great sensation, and we are told, it was eagerly laid hold off by the enemies of the Reformation, and published in foreign countries, but making no mention of Kello's contrition and sincere repentance; and likewise that there were "diverse licentious and ungodly pictures to withdraw the simpill from God's obedience." To counteract such efforts, his Confession was printed, according to which he exhorted the multitude who were present at his execution "not to measure the truth of God's word by the lives or folly of the preachers." His goods, as usual in such cases, being escheated to the Crown, on the following day, a grant was made in favour of Bartilmo Kello, and Barbara and Besse Kellois, his lawful children.

The son received a learned education, probably at St Andrews; and appears to have obtained occasional employment in ecclesiastical matters. The King had also employed him abroad on some special service, as the Treasurer, in January 1600, paid to "Barthill Kello, being direct be his Hienes to the Low Countreis, for support of his chargis, £100 0 0."

Esther Inglis and Bartholomew Kello were married about the year 1596. From a Bill of Suspension granted by the Privy Council, 8th February 1597-8, we find that an action had been raised at the instance

of Barthilmo Kello, indweller in Edinburgh, and Esther Inglis his spouse, against Thomas Foullis, goldsmith, and John Gourlay, merchant, both in Edinburgh, their debtors for some money, the amount not stated. To the same period may be referred the following warrant in favour of Kello. It does not follow that he was actually appointed to be "Clerk of all Passports," &c., as this unsigned warrant sets forth; but there can be no doubt that "the maist exquisit & perfyte wreater" was his wife.

"OVR SOVERANE LORD ordanis ane lettir to be maid vnder the Previe Seil in dew forme makand mentioun, that his Hienes vnderstanding that there occuris oftymes wreatingis sik as Pasportis, Testimonialis, Letteris of Commendation and Recommendation, Missiues and vtheris lyke to be grantit and direct be vs to Forrayne Princes, Personnages, Estaitis, & Nationis, quhairin fault sumtyme may be found in the forme of the lettir throu imperfection of the wreater, and sumtymes for that the autentick copies ar not referuit in register, quhairthrow his Hienes is oftymes circumuenit it being ane mater tending to the aduancement of his honour, & als of this Realme and nation and that therefore it is verie requisit that al sik wreatingis be put in cumlie and decent maner of lettir and forme be the maist exquisit & perfyte wreater within this Realme as als committit to register be ane persone of gude credeit and preferment, and being surelie persuadit of his louit BARTHILMO KELLO and of his gude qualeties habil to discharge him of that cure. Therefore makand constituand and ordinand the said Barthilmo Kello Clerk ouer al sik Pasportis, Testimonialis, Lettirs of commendation and recommendation, Missiues and vtheris alyke to be grantit and direct be our Souerane Lord to forrayne Princes, Personnages, Estaitis, and Nationis. Gifand and commitand to the said Barthilmo Kello the office and charge thereof during al the dayes of his lyftyme and disponand to him all fies, casualities and dewties belangand and that sallahappin to belang and apertin thereto. With power to the said Barthilmo Kello, to wreat or cause al the sadis lettiris be his direction be wreatin BE THE MEST EXQUISIT WREATER WITHIN THIS REALME, iniunand also to the said Barthilmo Kello to put and commit to register all sik wreatis as salbe wreatin be him or be his direction, and subscriuit be his Ma^{tie} to the effect that accompt and tryal may be taken thereof as necessitie sal requyre, & the saming lettir to be extendit in the best forme, with al clausis nedful, with command

therein to the keiparis of his Hienes seilis, and signetis that nane of thame ressaue or passe ony siklyk forrayne wreatingis to be subseruyit be his Hienes in tyme cuming except the saming be wreatin be the said Barthilmo Kello or be his direction and marked at vnder with his name, dischairging thame thereof & of there offices in that pairt, dischairging also al his hienes Leiges and vtheris quhom it effeiris of all wreating of ony sik lettiris without the said Barthilmo Kellois gude wil and command, & that they do nor attempt na thing to the breaking & violation of the said lettir in ony point vnder al hiest payn, charge, & offence, that they & ilkane of thame may inrin againis his Ma^{tie} in that behalf & lettiris of publication to be direct heirupon in forme as effeiris. Subseruyit be our Souerane Lord at the day of "

In a MS. Album in my possession, there are two pages facing each other, one signed by Bartholomæus Kello, at London, 8th August 1604, the other by Esther Inglis, addressed—"A mon intime amy et tres-aimé frere M. G. C." [George Craig], with two French extracts, in various styles of writing, from Ps. cxlv. v. 5, and Eccles.; and ending thus:—"Christ is my vantage in life and death. Be zour assured loving Sister in the Lord—ESTHER INGLIS."

The several volumes written by Esther Inglis are so dispersed, some of them having found their way to libraries abroad, that no doubt there are various others which I have had no opportunity to examine. Only two volumes are known of an earlier date than the year 1599, by which time she had secured the respect of some learned men in this country, such as Andrew Melville and Robert Rollock, Principals of the Universities of Glasgow and Edinburgh, and John Johnston of St Andrews, each of whom addressed copies of Latin verses in her commendation, which she continued to prefix to several of her later productions. As these invariably are dedicated to persons of rank or distinction, we may conclude that to some extent she was dependent on the gratuities received in return. It may also betoken no small degree of vanity, that she was accustomed to prefix her own portrait drawn in miniature; but it has happened in many instances that the metallic colours have turned black.

The original Portrait of Esther Inglis in oil, now exhibited, has the date A.D. 1595. It is painted on panel; and at the upper corner to the

left, is a device, apparently of a carnation and honeysuckle interlaced as a knot. It fell into my hands accidentally at a sale in Edinburgh about two years ago, without knowing from what collection it came, or who the painter was. (A reduced engraving of this portrait is here given.)

Descriptive List of her Manuscripts.

I.

LIVRET CONTENANT DIVERSES SORTES DE LETTRES, ESCRIT A LISLEBOVRG, PAR ESTHER LANGLOIS, FRANÇOISE, 1586. In the British Museum.

(Sloane MSS., No. 987). An oblong 4to, containing 32 leaves. The leaves are written on one side, and contain only the 2d and 94th Psalms, one verse of a French and the corresponding one of a Latin version, occupying each leaf, except that towards the end there are three pages of alphabets; and on the last leaf the following lines, given by Mr Holmes,¹ to show that her parents were then alive:—

Huius ipsius Libelli Prosopopœia.

Filia me scripsit mandante vtroque Parente,
Exilii calamo tædia discutiens.

In scribendi artificium.

Pictores hominum pinxerunt membra colore.
Penna hominum at varie pingere verba potest.

A verse of the Second Psalm, as a specimen, may be quoted:—

11.

Du Seigneur Dieu seruiteurs rendez vous,
Craignez son ire, et luy vueillez complaire;
Et d'estre à luy vous resiouissez tous,
Ayans tousiours crainte de luy dispaire.

11.

Et vanas auferte minas, submittite tandem,
Facti humiles, forti corda superba Deo,
Quinetiam cum læti eritis timor illius adsit,
Iratum grauis est res habuisse Deum.

¹ Proceedings of the Society of Antiquaries of London, vol. i. new series, p. 319.



ESTHER INGLIS.

II.

LIVRET TRAITTANT DE LA GRANDEUR DE DIEU, ET DE LA COGNOISSANCE QU'ON PEUT AVOIR DE LUY PAR SES ŒUVRES. ESCRIT PAR ESTHER LANGLOIS, FILLE FRANÇOISE, DE DIEPPE M.D.XCII.

Small oblong volume, written in various characters, containing 100 Quatrains. I lately obtained this choice little volume from Leipzig, where it had figured for some time in a bookseller's catalogue.

This volume is interesting, as the only other one known, which is written by her under her original name Langlois. The phrase *de Dieppe* may perhaps indicate her birth-place. At the end of the book are four lines by her father in Latin:—

"Tetrasticha hoc in Libello varie descripta Lectori," signed

"N. ANGL. DICTÆ PUELLE PATER."

This, if any evidence were required, settles the matter of her parentage. And on the following leaf is repeated the distich,—

Hujus ipsius Libelli Prosopopæia.

Filia me scripsit mandante utroque Parente,
Desidiæ calamo tædia discutiens.

Nil Penna sed usus.

III.

"THE PSALMS OF DAVID, written in French with her own hand, and presented to Queen Elizabeth by Mrs Inglis herself; and was by that renowned Princess given to the Library of Christ Church, Oxford."—*Ballard.*

A description of this interesting volume, as follows, was kindly communicated by the Rev. W. D. Macray:—

A French Psalter, occupying with title and introductory matter 83 leaves, bound in (very much faded) crimson velvet, embroidered with the Tudor rose and crown, and studded with a large number of pearls; a few of which have been lost, and some five or six loose ones are wrapped up in paper.

The title is followed by a dedication in French to the Queen, dated "De Lislebourg en Escosse, ce xxvii. de Mars 1599," signed Esther

Anglois, François, in which the writer begs that her book may occupy some "coing retiré" of the Queen's cabinet. On the back of the title is a drawing of the royal arms, with the lion and dragon as supporters. Within a fanciful border, commendatory verses to the Queen by Robert Rollock, Andrew Melvin, and John Johnston, and to Mrs Inglis herself, by the same three, are prefixed; with a portrait of Mrs Inglis in a very quaint head-dress, with peaked top, and large fan-like wings. There is no entry to show how or when the book came to Christ Church; and the only possessor's name in the book is that of one "Anne Ancram." (This was Lady Anne Stanley, daughter of William Earl of Derby, who became the second wife of Sir Robert Ker, Earl of Ancram.)

A tres haute, tres excellente et tres puissante Princesse Elizabeth,
Roine d'Angleterre, France, et Ireland,—

MADAME,—Il ne desplaira pas a vostre Ma^{te} que ie prens la hardiesse de vous faire offre de ce mien labeur et fruicts de ma plume, ne ayant chose plus singuliere pour vous presenter, sinon pour la varieté de l'écriture, de laquelle ie pense auoir tracé autant de façons diverses qu'aucun autre de ce temps, au moins pour l'excellence du sujet digne d'une Roine, laquelle entre tous les Princes approche de plus près a ce Royal Prophete. Les historiens du temps passé ont laissé par escrit, que les anciens, a ceux desquels ils avoient tiré grand proufit, qu'ils repouterent pour dieux, chacun selon leur qualité faisoit quelques offrande: Et que le pauvre bon homme n'ayant autre present apporte a ce grand Roy un peu d'eau claire, ce qu'il receut d'aussi bon cœur qu'aucune autre offrande tant feust elle riche ou grande: Les deux mailles de la pauvre vefue, ne furent pas reiettees pour leur petitesse. Ce qui m'a induitte avec plus grande confidence, quoy que ie sois femme, et de petite condition, d'esperer que ce petit present, escrit de ma main, au pais estranger, pourra obtenir place en quelque coing retiré de vostre cabinet, et acquerir telle faueur auprès de vostre Ma^{te} si Royale et gratieuse que ayant recerchee plus curieusement, selon la rare naifueté de vostre censure, la diuersité des caracteres, tirees d'une main feminine, que ie ne soie plus condamnée pour temeraire, ains ma pauureté de biens, et d'esprit, et de main qui m'empeschent d'offrir present plus digne de vostre grandeur excusée et la volonté prise en bonne part. Et si i'eusse peu faire quelque chose de

plus rare, ou par ma plume mettre en avant œuure qui meritast d'estre veu de si bon œil, vostre Ma^{te} sentiroit comme ie l'ay tousiours reputée entre les premiers dieux d'ici bas, et augmenteroye mes offrandes d'aussi bon cœur que ie supplie le Roy des rois honorer vostre Ma^{te} en toutes vos actions de sa presence par son St Esprit, vous donnant en toute fœlicité tres heureuse et longue vie. De Lislebourg en Escosse ce xxvii. de Mars 1599. De vostre Maïesté la tres humble, tres affectionnée, & tres obeissante seruante a iamais,

ESTHER ANGLAIS, Françoisse.

IV.

LES PROVERBES DE SALOMON, ESCRITES EN DIUERSSES SORTES DE LETTRES, PAR ESTHER ANGLAIS, Françoisse. A LISLEBOURG EN ESCOSSE, 1599.

In the Bodleian Library, Oxford, in small 4to, ending on p. 67. After the title are the armorial bearings of Robert Earl of Essex, Queen Elizabeth's favourite, followed by sets of Latin verses addressed to the Earl of Essex, and also to the writer, by Andrew Melville, Robert Rollock, and John Johnston, and her own portrait on the fifth leaf. A letter in French to Robert Comte d'Essex, is dated "De Lislebourg en Escosse, ce xiii. d'Auril 1599," signed "ESTHER ANGLAIS, Françoisse." "This delicate performance (says Ballard) gains the admiration of all who see it; every chapter is wrote in a different hand, as is the dedication, and some other things, which makes near forty several sorts of hands," &c.

John Evelyn, in his visit to Oxford, in 1654, mentions in his Diary this volume as having been shown him in the Bodleian Library, among "the nicer curiosities." It is at the present day exhibited to visitors among choice specimens of writing and illumination, in one of the glass-cases.

The portrait from this MS. was engraved for Harding's Biographical Mirror, vol. iii. 1801, and likewise accompanies this notice.

V.

LE LIVRE DE L'ECCLESIASTE ENSEMBLE LE CANTIQUE DE SALOMON, ESCRITES EN DIVERSES SORTES DE LETTRES, PAR ESTHER ANGLAIS, Françoisse. A LISLEBOURG, EN ESCOSSE, 1599.

On the reverse of this title is a shield of the arms of Anthony Bacon, the fourth son of Sir Nicholas Bacon, and brother of Lord Bacon. Opposite to this is the portrait of the writer herself, which she usually intro-

duced in her subsequent volumes, representing her standing with a pen in her hand before a table, on which there is a lute, an open piece of music, and an inkstand. This beautiful little volume is in the possession of Felix Slade, Esq., and was exhibited to the Antiquaries of London, and also at the Archæological Institute at their meeting at Worcester. Mr Holmes, in the "Proceedings of the Society of Antiquaries of London" (vol. i. new series, p. 316), has given a minute description of the volume, including the French dedication,—“A tres honorable tres docte et vertueux personnage M. Antoine Bacon,” &c., dated from Edinburgh, 14th of April 1599. It likewise has the Latin verses prefixed, by Andrew Melville, Robert Rollock, and John Johnston.

VI.

HISTORIÆ MEMORABILES GENESIS, PER ESTHERUM INGLIS, GALLUM. EDINBURGI, ANNO 1600.

This volume is mentioned by Thomas Hearne, in his notes to “Guil. Neubrigensis,” *Historia*, 1719, p. 752. It was then in the hands of Philip Harcourt, Esq., Gentleman Commoner of Worcester College, in this University.

VII.

OCTONARIES, UPON THE VANITIE AND INCONSTANCIE OF THE WORLD. WRITTIN BY ESTHER INGLIS. THE FIRST OF JANUAR 1600; consisting of fifty oblong octavos, in French and English verse, and with her own portrait.

This MS. is described in W. Massey’s “Origin and Progress of Letters,” p. 144. London, 1763, 8vo. It then belonged to Mr Cripps, in Bridge Row, London.

VIII.

LE LIVRE DE L’ECCLESIASTE ET LE CANTIQUE DES CANTIQUES. A LISLEBOURG EN ECOSSE, CE XXI AVRIL, 1601. 12mo.

This MS. is noticed in the “Biographie Universelle,” &c., tome xiii. p. 157, as in the possession of M. Walckenaer. It has her own portrait, with the usual motto—

“De l’Eternel
Le bien,
De moy le mal
Ou rien.”

IX.

A volume in oblong 4to, in the old vellum cover, but the title is lost, dedicated—"To the Right Noble Vertvovs and Honorable Ladie Svsanna Ladie Herbert."

It begins,—“The Bee draweth noght (most noble and vertuous Ladie), hwny from the fragrant herbis of the garding for her self: no more haue I payned my self many yearis to burie the talent God has geuen me in obliuion.” . . .

And is dated “At London the xx of Februar 1605.

Your L. humble and obedient seruant
for euer to command

ESTHER INGLIS.

This volume contains 40 leaves, of specimens of various styles of writing, with Alphabets of letters. It was exhibited in the temporary Museum of the Archæological Institute at Dorchester, in August 1865, by the Rev. Mr Bingham. On the inside cover is written, “Mrs Wynyard, Kensington Palace. 140 different handwritings besides the dedication.”

X.

A volume of Texts of Scripture, and small groups of flowers, noticed by Mr Holmes, in the possession of Mr Caldecott, of Andover, and has this inscription,—“A new year’s guift for the right Honourable and vertuous Lord, my Lord Sydnay—1st January 1606.”

XI.

ARGVMENTA SINGVLORVM CAPITVM EVANGELII MATTHÆI APOSTOLI, PER TETRASTICHA MANV ESTHERÆ INGLIS EXARATA. LONDINI XXVI IANVARII, 1607.

Small oblong volume, containing title, dedication (as follows), and 28 leaves, neatly written in different characters, with drawings of flowers at the head of each leaf; in the original gilt binding. In the possession of John Scott Moncreiff, Esq., Edinburgh.

“To the Right Honorable and most Noble Lord William Earle of Morton, Lord of Dalkeyth, &c.

“MY LORD,—That one unknown to your Lo: has emboldned hir selfe to

present you with a few grapes of hir collection, I hope your Lo : shal not altogether mislyk therof nather yit trust I to be esteemed impudent in transending the limites of schamefastnes (wherwith our sexe is commonlie adorned) in offring this small work of my pen and pensill to y^r Lo : For the Bee draweth not hony from the fragrant flouris of the gardein for her selfe allone, no more have I endeavored to attayne to sum small perfection in this facultie to hyd or cover the same.

“ Therfore sen I hard of y^r cumming to this countrie, I have bene exercised in perfyting this little book dedicated to y^r Lo : Beseeching you accept of it and the rather becaus it is a womans work. Thus assuring my selfe thir blossomes I have collected of Dame Flora shall have sum hid corner in your Lo : cabinet, I pray God (most noble Lord) to have you allwayes in his keeping.

By your Lo : most humble seruand

ESTHER INGLIS.

Cap. i. 4 lines.—Maiores numerant sancti et primordia Christi.

Cap. ii.—Fœlici veniunt deducti sydere Persæ.

XII.

CINQUANTE OCTONAIRES SVR LA VANITÉ ET INCONSTANCE DV MONDE.
DEDIEZ A TRESILLVSTRE ET PVISSANT SEIGNEVR LODOWIC DVC DE LENOX &C :
POVR SES ESTRENNES. ESCRIT ET ILLVMINE PAR ESTHER INGLIS 1607.

This title, within a small ornamented border of flowers. It is a little volume, oblong, measuring $3\frac{7}{8}$ by $5\frac{1}{8}$. In the library of the Right Hon. Sir George Clerk of Penicuik, Bart.

After the title, and dedication to Ludovic Duke of Lennox, is the writer's own portrait, “ ESTHER INGLIS · ANNO · 1607;” with an open book and a pen in her hand, but the metallic colours have changed, and the face is nearly obliterated. Then follow the Octonaires, on 50 leaves, in different styles of writing; each leaf having a flower at the top, neatly drawn.

A Tresillvstre et Puissant Seigneur Lodowic Duc de Lennox, &c :

MONSEIGNEUR,—Encores que ie n'ay jamais en cest heur de presenter quelque œuvre de ma main a vostre Excellence, toutes fois vostre grandeur et vertu laquelle n'est ignorée a personne de ce Royaume m'estant

représentée par plusieurs, J'ay pris la hardiesse de vous faire offre de ce petit ouvrage escrit et tracé par ma plume, laquelle estant en quelque estime a l'endroit d'aucuns ne peut croire qu'elle soit digne d'aucun loz si leur opinion, n'est confirmée par vostre excellent iugement. Quelle quelle soit elle est vouée a vostre Ex^{ce} la suppliant en toute humilité de recevoir fauorablement ce que i'ay formé et dedie pour vos Estrennes au commencement de c'est annee, que ie supplie Dieu.

Monseigneur de la vous donner bonne, heureuse, et selon vos saintes desirs suivie a l'advenir d'autant d'années de ceste sorte qu'auoit le sage NESTOR vos vertus ne meritanes moins, et vostre prudent conseil servant autant a sa Majesté que fit le sien au Roy Agamemnon. Ainsi baisant tres humblement les mains de vostre Excellence, jè demeureray
a jamais,

Vostre treshumble servante,

ESTHER INGLIS.

XIII.

LES QUATRAINS DU SIEUR DE PYBRAC, DEDIEZ A TRESILLUSTRE ET TRES NOBLE SEIGNEUR MONSEIGNEUR LE CONTE DE SALISBERRIE POUR SES ESTRENNES DE L'AN 1607. ESCRIT ET ILLUMINÉ PAR MOI ESTHER INGLIS.

This little oblong volume I obtained not long since at a London sale, in a loose, sadly mutilated state, the small flowers or ornaments at the head of most of the leaves having been cut out. One or two of these happen to have escaped notice, and serve to show the same style of illumination as in No. xii.

XIV.

SPECIMENS OF VARIOUS STYLES OF WRITING.

This volume, in the Library of the Society of Antiquaries of Scotland, has lost its title or dedication. It consists of 21 leaves in oblong 4to, with specimens of penmanship. It was presented to the Society by Hugh Stuart, Esq. of Allanbank, 24th April 1828.

XV.

SPECIMENS OF VARIOUS STYLES OF WRITING.

A volume somewhat similar with the above, oblong size, 4to, of 36 leaves, having no title or dedication to ascertain its date and first proprietor. It consists of specimens of exquisite penmanship in a great

variety of styles, with ornamented capital letters. Nothing can exceed the beauty of its execution. In the same volume are some folding leaves. One is the copy of a Royal Warrant in favour of Bartholomew Kello, printed at page 288. Another a Latin version of the 104th Psalm in double columns, translated by Mr George Geddie; there are also two elaborate pen and ink drawings, in the style of engravings, being portraits of Henry IV. of France and Gabrielle D'Estelle his mistress.

This volume I bought so long since as the year 1828, at the sale of Mr Constable's library.

XVI.

Another volume in my possession differs from Mrs Esther's various manuscripts, being simply, without any ornamental writing, an imitation of the types of a printed book, 35 leaves, 4to. It contains a translation by her husband, entitled A TREATISE OF PREPARATION TO THE HOLY SUPPER OF OUR ONLY SAVIOUR AND REDEEMER JESUS CHRIST. Proper for all those who would worthely appoach to the Holy Table of our Lord. Moreover a Dialogue contendant the Principal poynts which they who wold communicate should knowe and understand. Translated out of French in Inglishe for the benefite of all who truely loue the Lord Jesus. By BARTHOLOMEW KELLO, Person of Willingale Spayne in the Countye of Essex.

It has the following dedication:—

To the Right Honorable Sir David Murray Knight Gent: of the Prince his Bed Chalmer, and Maister of his Robbs, &c.

"The temporall giufts of God (right honorable, and worthy to be honoured) bestowed upon man (if they be not sanctified) are giuen for there greater destruction: as the celeritie of Asahel made him swiftly to ryn upon the Speir¹ of Abner: the beauty and quantity of Absaloms hair tyed him fast to one Oke² in the Woode of Ephraim. Pompeys virtue caused the losse of his head: Cæsars power was intolerable to Cassius, and therefore by him and his complices was he cruellie killed in the Senat house: Cicerois eloquence was inuoyed of Salustius, and procured his death by the hand of Antonius. So that I affirme altho all the naturall qualities vnder heaven wer in any one (if possible so could be) if they be not regenerat and sanctified but ignorant of the Lord Jesus and voyd of heauenlie graces, they have no true qualitie but a few accidents of Nature, that shall perish with them and cause

¹ 2 Sam. 2 ch. 23. v.

² 2 Sam. 18 ch. 9. v.

their greater judgement: for it is wele set furth by that Ethenick Poet Virgill in *Ætna*, “*Est meritò pietas homini tutissima virtus.*” I writ this Sir to yow, esteeming you in my hart most happy on whome God hes multiplied many good guifts and graces not only of the body, but lykewise hath giuen you a beautyfull soule: So that truly it may be said to you which Our Sauour sayes to the faythfull soule Behold thou art fair¹ my love. The beautie of the soule is properlye that which neuer taketh end but lesteth for ever in heaven. That is the treu beautie which can not be blotted out, nor consumed by seiknesse, no not by death: the beautie of the bodie is short, corruptible, and of a moments continuance, but that of the soule is perpetuall. This beautie surpassis all that is beautifull in the Univers, alsfar as the heaven in beautie surpasseth the earth. Therefor thrie tymes double blessed yow, on whome God hath not only bestowed temporal beautie and many gifts of the body, but lykewise a most godlie and beautifull soule. And since I haue the experience of your godlye disposition I could do no les being more obliged to you nor any els liuing, nor to imploy the trauails of my pen upon this litle Treatise translated in Inglish by my Husband the which he is myndit to dedicat to you in sign of his thankfulnes so sone as he shal cause printe the same. I have in the meane season made the more hast because I know it is a sujet will content you, and to all who truly fear the Lord (when it cumis out) will not be improfitable. Thus trusting (right honorable) you shal accept heirof in good part, as you haue ever doone anything proceeding from me. I pray th’ Almightye God always to continew and increas with you, his blessings spirituall and temporall to his glory and your euerlasting confort. London this first of January 1608.—Your most humble seruand,

ESTHER INGLIS.

On referring to Newcourt’s Repertorium (vol. ii. p. 670), it appears that Bartholomew Kello was collated to the Rectory of Willingale Spain, near Chelmsford, in Essex, 21st December 1607, the King being patron. The date of his successor’s appointment is not given.

XVII.

A BOOK OF THE ARMES OF ENGLAND DOONE BY ME ESTHER INGLIS, JANUAR THE FIRST 1609.

This title, on the first leaf, is with a fleur-de-lys, powdered with little gilt dots. Within a heart formed by a wreath of green leaves and red and gold flowers, surmounted by a hand holding a golden pen, is written the dedication—TO THE MOST EXCELLENT PRINCE HENRY, PRINCE OF WALES. Sir, as your Highnes sees heir the figure of a heart and hand, even so the lively heart and hand of hir who formed it, so long as I

¹ 4 Cant. : 1: v.

breath, as vowed to your Most Excellent Highnes service. Receiue then, Sir, in good pairt this litle mytte doone by

Your most humble seruand, ESTHER INGLIS.

This is followed by her own portrait. It is a charming volume, bound in green velvet, worked on both sides with the Prince of Wales' plume in silver, amidst diapering of seed pearls wrought after a very artistic manner. The book itself is a sort of small peerage, with the shields and crests of sixty-four members of the House of Lords, nicely tricked in their proper colours and metals by the skilful hand of Esther Inglis, who offered this exquisite little work as a New Year's gift to Henry, Prince of Wales, eldest son of James I. In the Proceedings of the Archæological Institute, 1862, p. 188, along with the preceding description, is given the subsequent history of the volume, tracing it into the possession of Sir Thomas Rokewood Gage, Bart. This beautiful little volume was exhibited at a meeting of the Archæological Institute of London, 2d May 1862; and again that year at Worcester, where I had an opportunity to examine it.

XVIII.

THE PSALMS OF DAVID, Written by me, ESTHER INGLIS AT WILLINGALL SPAIN, THE 1ST OF JANUARY 1612.

This volume is mentioned by Harding as containing her portrait done by herself. It was in Dr Farmer's sale in 1798 (No. 8098); and again in Bindley's sale, 1820. Its present possessor is not known.

XIX.

LES PSEAVMES DE DAVID. ESCRIT PAR ESTHER INGLIS, LE XV. DE SEPT. 1612.

In the Royal Library, Stockholm. The volume measures $2\frac{7}{8}$ inches by 2. The title is within a narrow gilt border. On the next leaf the EPISTRE commences,—

A tres hant tres excellent et vertueux Prince, HENRY Prince de la Grande Bretagne.

SIRE—L'excellence de quelque chose, et le profit qui en reuient, est-ce principalement qui a accoustumé d'induire les hommes a desirer et rechercher tant la cognoissance que la iouissance d'icelle. Or ces deux

qualitez se retrouuans trop plus grandes et trop plus certaines sans comparaison en la Sainte Bible, qu'en œuvre qui ait iamais este faite, ni qui se puisse faire ci après, c'est vne chose merueilleusement indigne et honteuse aux hommes, que ce liure soit celui duquel on se soucie le moins, pour en bien coignoistre le contenu, et tascher d'en recevoir le fruit qui nous y est non seulement offert, mais aussi gratuitement présenté et donné.

After some general remarks on the Book of Psalms, it proceeds,—

Les Hebreux ont intitulé ce Liure d'un nom qui signifie louanges, ou cantiques pour monstrier que cest un recueil des chansons vrayement spirituelles qui ont esté diuinement inspirees pour enseigner comment il faut celebrer les œuvres admirables de l'Eternel. Et nonobstant, Sire, que ceste narration ci dessus sembleroit chose temeraire de ma part et superflue enuers vous, a qui Dieu a donné tant de graces, et a qui tant de plumes s'efforcent de louer et exalter, iusques au ciel, les grandes, saintes, et rares vertus, desquelles sa Diuine Maiesté, a orné vostre Royale personne, vous faisant paroistre et reluire sur tous les Princes de vostre aage en la Chrestienté et admirer de tout l'Vniuers. Toutesfois me persuadent de vostre faueur accoustumee, l'ay prins la hardiesse de vous offrir treshumblement, et en toute reuerence, pour la seconde fois, ce Liure de Pseaumes en petit volume, en langue François, tracee d'une main feminine, et d'autant plus volontiers que j'ay entendu le premier vous auoir esté pour agreable, m'estimant bien heureuse, en ceste miene condition solitaire, s'il y a quelque traict que puisse contenter vostre haut et diuin Esprit. Et sous ceste esperance Je prie Dieu, SIRE, qu'il vous donne en sa grace, tout le bien, l'honneur, et contentement, que ie vous scaurois iamais desirer : comme estant

De vostre Altesse, la treshumble et tres obeissante seruante.

ESTHER INGLIS.

The Psalms are in prose. After the Epistle to Prince Henry is a small miniature portrait of herself, and some French verses, signed VELDE, "A l'vniue et souveraine Dame de la plume, ESTHER INGLIS."

Prince Henry, it is well known, died within two months of the date of this dedication. How the volume found its way to Sweden, I was not able to ascertain.

XX., XXI., XXII.

QUATRAINS DU SIEUR DE PYBRAC.

Three several copies, in the original velvet covers, of these favourite Quatrains are in the British Museum. One is inscribed to Messire David Murray, whom she styles her Mæcenas, in 1614. The second, in 1615, to Charles Prince of Wales. The third, to her "respected friend Mr Walter Balcanquall, Bachelor of Divinitie." He was afterwards D.D. and Dean of Durham.

XXIII.

OCTONAIRES SVR LA VANITÉ ET INCONSTANCE DV MONDE ESCRITS PAR ESTHER INGLIS, A LISLEBOVRG, AOVT 1615.

Within a light ornamented border. Small oblong 24mo, in the original gilt binding, in the possession of James Douglas of Cavers, Esq.

After the title is a leaf of dedication—"Pour Monsieur treshonoré Monsieur André Ramsay, fidele Ministre de la parole de Dieu, a Lislebourg, Esther Inglis, souhaite tout bonheur."

See next No. xxiv. Some leaves have been cut out; it begins with Octo. V. and continued to Octo. L., written in imitation of printing—the first letter of each being gilt.

XXIV.

LES CINQUANTE OCTONAIRES SVR LA VANITÉ ET INCONSTANCE DV MONDE. ESCRITS PAR ESTHER INGLIS POVR SON DERNIER ADIEV. CE I. IOVR DE L'AN. 1616.

This little volume is a repetition of Nos. XII. and XXIII. It is in the original gilt binding, measuring about 3 inches by 2. It was presented to the Advocates Library, Edinburgh, about the year 1700, by Mr Alexander Hay, King's Apothecary. It has no dedication, but on the cover is an erased inscription, which seems to read "For my cousin Mr Robert Frenche, Clerk of Kircaldie, 17 Junij 1616."

XXV.

LES SIX VINGTS ET SIX QUATRAINS DE GUY DE FAVER SIEUR DE PYBRAC. ESCRITS PAR ESTHER INGLIS POVR SON DERNIER ADIEV. CE 21 JOVR DE IVIN. 1617.

This little oblong volume, in the Bodleian Library, Oxford, is another

repetition of Nos. XX., XXI., and XXII. On the second leaf is this inscription—"To the Right Worshipfull my singular friende JOSEPH HALL, Doctor of Divinity and Deane of Worchester, ESTHER INGLIS wisheth all increase of true happiness June xxi. 1617." The following leaf has her portrait as usual. It is scarcely necessary to add, that the Dean of Worcester became successively Bishop of Exeter and Norwich.

XXVI.

AN EMBLEMATICAL DRAWING OF MARY QUEEN OF SCOTS, with verses in Latin and English, inscribed to John Earl of Mar, drawn and written by ESTHER INGLIS, Janu. 1622.

It is to be regretted that we cannot ascertain where this interesting drawing is preserved. It occurs as No. 1918, in the Sale Catalogue of the remarkable library of James West, President of the Royal Society of London, sold by auction in 1770.

XXVII.

FIFTY EMBLEMS SELECTED FROM THE VOLUME OF GEORGETTE DE MONTENAY, BY ESTHER INGLIS, 1624.

This most elaborate performance, executed with pen and ink in the style of engraving, is in folio, bound in crimson satin, embroidered, and is preserved among the Royal Manuscripts in the British Museum. 17 D. xvi.

On the first leaf is this memorandum—

"GENTLE READER

"LEAST YOV SHOVLÐ SOYL THIS BOOKE IN SEARCHING OVT THE NAMES IN PARTICULAR OF ANY OF THE FIFTIE NOBLES therein contened. You have a Table in the last leafe thereof that shall direct you to them be the number of the EMBLEMES."

Follows the title within an ornamented compartment:—

Ce Livre contenant Cinquante Emblemes Chrestiens premierement inuentez par la noble damoiselle Georgette de Montenay en France, forts plaisants & delectables a lire & voir lesquels sont, a present, escrits, tirez, et tracez, par la main et plume de moy ESTHER INGLIS, l'an de mon aage Cinquante et trois.

A Lislebovirg en Escosse, l'an 1624.

This volume, which from several dates appears to have been executed in the years 1622, 1623, and 1624, is dedicated (with a drawing of a

Phoenix, &c.), "To the Thrice illustrious and most excellent Prince CHARLES the onlie Sonne of our Sovereigne Lord the King." It begins:—

My pen is now prepared to writte to your HIGHNESSE the onlie PHOENIX of this age, whose innumerable graces and matchlesse virtues, hath exceedingly dazeled the eyes and amazed the minds of most men and weemen.

Onlie as it is written of Adrian the Emperour that he perfectly (euer afterward) did know them that had but once spoken vnto him, I beseech the Almighty God of his mercie so to blesse your Highnesse with such a happy and good memorie, that amongst all those that haue, or shall either speake or consecrat anye of their trauals to your Highnesse you may remember me your Graces humble hand-maid. And after that be your Highnesse direction thir fiftie Emblemes, the fruits of my pen (but the inuention of a noble Lady of France whose portraict is in the forefront heerof) haue bene presented to the sight and view of fiftie of the Kings Majestie and your Highnesse worthys whose names are insert therein, may be brought backe. And as the curious works of Aholiab and Bezaleel were to be sene long after their dayes in the Temple: So this small pledge of my duetifull and verie humble obeissance may haue sum retired place in your Highnesse Cabinet. Thus having transcended the bounds of modestie, where with our Sexe is commonlie adorned, with all humilitie I beseech your Highnesse not to reject the good meaning of your most humble seruand and obedient subject, but to pardon his errors, who prayeth God to multiplie all graces and blessings vpon your Highnesse.

Your Highnesse most humble
hand-maid and faithful subject

ESTHER INGLIS.

After the dedication comes the portrait of Georgette de Montenay, copied with the pen, and some French and Latin lines underneath.

Then a similar leaf containing an oval portrait of Esther Inglis herself, with some Latin lines in her commendation, which were written by Andrew Melville, under her portrait in No. IV., in 1599 (see the engraving).

In Emblemata Christiana Estheræ Inglis (cujus effigiem hic vides) manu perarata et descripta.

Si mihi mens, tibi quæ manus est, ego pingere tentem

Mente mea, manus hoc quod tua pinxit Opus.

Si mihi, quæ tibi mens, manus esset, pingere tentem

Ipse manu, mens hoc quod tua, pinxit Opus

Sed mihi nec manus hæc, nec mens: Tua pingere sola

Et mentem manus, et mens queat vna manum.

ALIVD.

Quod Natura, quod Ars, quod nec Natura, nec vlla Ars

Pinxerit hoc tua mens, pinxerit ista manus.

The similar lines by Rollock and Johnston follow—

In Emblemata Christiana, calamo exarata ab Esthera Inglis foemina varijs Dei donis adornato. R. R. [2 lines and 6 lines.]

In Estheram Inglis rarissimam Fœminam." [4 lines and 6 lines.] Signed I. I.

Next are three leaves of Emblems addressed to King James, Prince Charles, and Elizabeth Queen of Bohemia, with verses in Latin and French underneath each.

Within an ornamented border, on a separate leaf:—

"Heir follows Fiftie Emblems dedicat to Fiftie of the Kings Maiesties and Princis Highnes Worthies, as by their several names is expressed."

Each leaf contains an Emblem with verses in Latin and French, addressed to fifty of the chief persons of rank at the English court, selected and copied with great neatness from the original French volume. It was first published, with a hundred plates engraved by Pierre de Woeiriot, at Lyon, 1571, 4to, and there are various later editions in different languages. The author of these hundred emblems dedicated them to the same number of persons of distinction in France.

One of the later editions (of which a copy is preserved in the Museum) is intitled, "A Booke of Armes, or Remembrance, wherein ar One Hundreded Godly Emblemata, in pièces of brasse very fine graven, and adorned pleasant to bé sêen; First by the noble and industrious maide Georgetta de Montenay, invented and only in the French tongue elaborated; But now, in severall Languages, as; Latin, Spanish, Italian, Highdutch, English, and Lovedutch, méetre or verse wys, of the same manner declared and inventéd. Printed by care, and charges, of Johann Carl Vnckels, a Bookeseller in Franckfurtt au Mayn, Anno mdcxix." 8vo, pp. 447.

Some English verses (40 lines), "In commendation of the Nobel Georgetta de Montenay, and her Emblemata," are prefixed, signed "I. H."

In describing this MS., Mr Holmes has pointed out the circumstance, that Mrs Esther had deemed it prudent to cancel the third leaf, which was dedicated to Lionel Cranfield, Earl of Middlesex and Lord Treasurer; but who, before the volume had left her hands, having fallen

into disgrace, the leaf was cut out, and his Lordship's name in the Index covered with a slip of paper.

XXVIII.

THE BOOKE OF THE PSALME[s] OF DAVID IN PROSE. WRITTEN BE ESTHER INGLIS IN THE FIFTIE THREE YEERE OF HIR AGE AT EDENBROVGH THE V. MARCH [1]624.

This title is within a narrow ornamented border of flowers, followed by a dedication "To the thrice Illustrious and most excellent Prince Charles Prince of Great Britaine." It is dated "this v. of April 1624 at Edenbrugh, your Highnes most humble seruant and faithful subject ESTHER INGLIS."

A small vol., pp. 297, written in imitation of print; in curious ornamented filagree binding. It is preserved in the Royal Library, Copenhagen. MSS. 3380.

Along with her own portrait, the writer also repeats the Latin verses addressed to her nearly thirty years before by Melville, Rollock, and Johnston, along with four lines by "B. K.," her (husband Kello), in praise of this specimen of writing,—*calamo dilectæ conjugis*, according to whom she, by the use of her pen, excelled Apelles. Being completed within three months of her death, it may be reckoned her latest production, and cannot be said to exhibit any declension in its style from the finer examples of her skill.

MRS ESTHER INGLIS, spouse of BARTHILMO KELLO, indweller in Leith, died on the 30th of August 1624.

Robert Boyd of Trochrig, an eminent Scottish divine, long a minister in France, and for a short time Principal of the University of Edinburgh, thus records her death in his Obituary:—

"In the moneth of July 1625, having gone to Edinburgh, I learned of the death of Esther Inglis, wife of Bart. Kello, a woman endowed with many good gifts. Among others she was the first writer of any woman in her time, of which I have some beautiful monuments under her hand, of her friendship towards me and my wife." (Life of Boyd, in Wodrow's Biog. Collections, Maitland Club, vol. iii. p. 269.) In his original Diary, written in French, Boyd calls her "Esther Angloys." His words are:—

"Ce moys de Juillet 1625, étant à Edin., j'appris la mort d'Esther Angloys, femme de Bart. de Kello; damoysele doué de plusieurs beaux dons; et entre autres excellent escrivain, par dessus toutes les femmes de son siecle, dont j'ay quelques beaux monuments, de sa main et son amitie enverse ma femme et moy."

The Testament Dative, &c. of ESTHER INGILLIS was confirmed by the Commissaries of Edinburgh, 7th March 1625. Two daughters, Elizabeth and Marie Kellois, are mentioned. She could not boast of worldly possessions or wealth, inasmuch as the value of her goods was estimated at L.90, 13s. 4d., while her debts, consisting of borrowed money, came to L.246, 13s. 4d., leaving a deficiency of L.156 Scots.

Her husband survived her fourteen years, and is styled "Barthilmo Kello, minister of God's word, and indweller in Edinburgh." He died on the 15th March 1638, and he likewise was by no means affluent, as "the restis of free geir," (as it was called), after deducting L.124, 10s. of debt, amounted only to L.74, 10s. Scots money.

There is no occasion to say much of their descendants. Samuel Kello, their only son, was educated at Edinburgh, where he took his degree of A.M. in 1618. His name occurs as a writer of Latin verse, among those who congratulated King James on revisiting Edinburgh in 1617. His "Carmen Gratulatorium," addressed to his Majesty, was printed at Edinburgh that year in a separate form, pp. 12, 4to. A copy in the British Museum, from the old Royal Collection, has some anagrammatic devices, &c., neatly drawn with the pen, probably by his mother. She addressed to the King, in 1620, the following letter in his favour:—

MOST MIGHTIE MONARCHE,

Darre I presume vpon th' honnor and credit that I haue had at diuers tymes to speake your Royal Majesté, and hath euer found your Highnes favour, and vpon the gracious accepting of a litle work by this Youth giuen to your Highnes at Stirueling called *SINVS CÆLESTE*, as to mak humble suite for this one and last thing to this my only Sonne, who, hauing past his course two yeeres ago, would glaidlie follow Theologie if it shall please God. Yet as Dedalus was not hable to frie him selfe of

his imprisonment in the Isle Creta but by the help of wings mead of pennes and wax : even so my Sonne is not able to frie him selfe of inhabilitie to effectuat this his affection but by the wings of your Ma^{ties}. letter, composed by pen and waxe, throuch the which he may haue his flight happilie to sum fellowship either in Cambridge or Oxeffoord as occasion shall fall out. Wherefore, Gracious King, lett your most humble handmaid find this last fauour in your sight, to direct one of thir noble men by you, to signifie your Highnes will and command vnto your Secretarie, that when this my Sonne shall notifie vnto him of any fellowship, he may receaue without any hinderance your Majesties letter in the strictest maner. For the which I may haue my tossed mynd releaued of the great cair I haue perpetuallie for this said youth. And wee all of vs will neuer cease to beseech God to preserue and prolong your Majesties lyfe, with many happie and prosperous yeeres to Reigne ouer vs. Edenbrugh the xx of Iuin 1620.

Your Ma^{ties}.

most humble subject,

ESTHER INGLIS.

To the King

his most excellent Ma^{tie}.

This supplication seems to have secured his admission to Christ's Church, Oxford, and he afterwards obtained some preferment in the Church. According to information communicated to Ballard, he was minister of Speakshall or Spexall in Suffolk till his death. In Trinity College Library, Dublin, there is a MS. treatise of 33 leaves, by Samuel Kello, entitled "Balme for the Wounded Soule," dedicated to Lady Francis Benningfield; and in the margin is written, "Bungay, January 14, 1628."

I shall only add, that Ballard, after mentioning the names of some eminent caligraphers, says of Mrs Esther Inglis, "many others have been celebrated for their extraordinary talent this way; but this lady has excelled them all; what she has done, being almost incredible. One of the many delicate pieces she wrote was in the custody of Mr Samuel Kello, her great grandson, 1711." He has not specified its title by which it might have been identified; but when he adds, "Others are

remaining in the Castle of Edinburgh," we may safely assert he was very much mistaken.

In regard to the very remarkable skill in penmanship displayed by Esther Inglis in these MSS. there can be no difference of opinion. She has no claims to original genius, but as a caligraphist she is well entitled to a first place among artists of a secondary class, who have devoted themselves to miniature painting and illumination.

[Page 285. This page, with the notice of Nicholas Langlois and his wife, was sent to press before I was aware of having in my own possession two folio leaves in their autograph, containing a Latin letter and verses, addressed by "Nicolaus A. Gallus," to Mr David Lyndsay, minister of Leith. The letter is dated Edinburgh, "9. Calend. Septemb. 1574, quo die multa Christianorum millia, duos abhinc annos, in Galliis, trucidatione perfidiosa e vivis fuerunt sublata," in which he refers to the atrocities in France, and acknowledges his own obligations to Lyndsay. This autograph paper is also curious on another account, as it is written in various styles of penmanship. He says, "Uxor mea vario characteris genere, illa pro viribus in sequenti pagina, me suasore, descripsit." One of the sets of verses is an "Epitaphium Casp. Coligni," &c. At the foot is her signature—

Marie Presot Françoise escriuoit à EDIMBVRGH, le 24. d'Aoust. 1574. *MD*

We have no occasion to wonder at Esther's training and early skill in caligraphy, when we look at this specimen of her Mother's acquirements in the same art.]

Mr STUART exhibited to the meeting diagrams of some of the sculptures recently brought to light in caves near East Wemyss, in Fifeshire, and pointed out the resemblance which some of the figures showed to the symbols on the sculptured pillars of Scotland. He stated that it would now be necessary to examine all the caves of Scotland, many of which were associated historically with the early Christian missionaries as places of retreat, for sculptures.

MONDAY, 8th January 1866.

PROFESSOR SIR JAMES Y. SIMPSON, BART., V.P., in the Chair.

The following Gentlemen were balloted for and elected Fellows of the Society :—

REV. EDWARD L. BARNWELL, M.A., Ruthin, Wales.

ROBERT FARQUHARSON, of Haughton, Esq., Aberdeenshire.

J. LAIDLEY, of Seacliff, Esq., North Berwick.

WALTER J. TILL, Esq., Manor House, Croydon.

The Donations to the Museum and Library were as follows, and thanks were voted to the Donors :—

(1.) By DAVID D. BLACK, Esq., F.S.A. Scot.

Portions of a large Cinerary Urn of Reddish Clay, ornamented all over with parallel rows of small incised vertical lines. The urn contained pieces of Calcined Bones.

Two portions of Clay Slate, and an oblong piece of Sandstone, pierced at one extremity, apparently part of a small whetstone.

Also an oval Bead of Bright Blue Glass, with two bands of White Enamel surrounding each extremity. The bead measures $\frac{3}{4}$ of an inch in length.

Small square-shaped portion of Slaty micaceous Sandstone, of which the "Fairy Knowe" is composed.

Found in cairns called "Fairy Knowes," recently examined at Housegard, parish of Weesdale, Shetland.

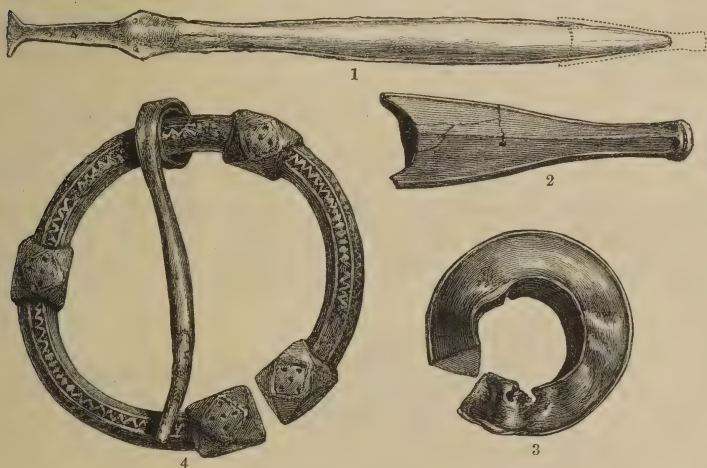
Portions of a Cinerary Urn, similar in character to the one last described; also an irregularly-shaped slab of Sandstone, measuring 11 inches across, and about 1 inch in thickness, which covered the urn. Found on the farm of Flemington, near Housegard.

Hammer of fine-grained stone, 4 inches in length, $1\frac{3}{4}$ inch in breadth, pierced with a hole for a handle, $\frac{7}{8}$ of an inch in diameter. It

was found on the farm of Scarpiegarth, Shetland. (See Communication, p. 324.)

(2.) By Mrs BELL, Forth Street, through J. M. Balfour, Esq., W.S., F.S.A. Scot.

Bronze leaf-shaped Sword, measuring 22 inches in length ; the handle-plate pierced with five holes for rivets (see the annexed figure, No. 1).



Bronze Sword and Scabbard Point ; Bronze Brooch and Gold Penannular Ring,
found at Gogar, near Edinburgh.

1. Bronze Sword, 22 inches in length (the scabbard point indicated in outline).
2. Scabbard Point, $4\frac{1}{2}$ inches in length.
3. Gold Ornament, $1\frac{1}{8}$ inch in diameter.
4. Bronze Brooch, 3 inches in diameter.

Bronze Scabbard Point, with a hole measuring $4\frac{1}{2}$ inches in length ; it is pierced on each side at about the middle of its length, on the alternate sides of the projecting centre rib ; apparently for its attachment to the scabbard (see figure No. 2.)

Gold Penannular Ring, $1\frac{1}{4}$ inch in diameter. It is triangular in its section, and is quite plain, or without ornament ; also a

Bronze ring-shaped Brooch, measuring 3 inches in diameter, with an

ornamental pattern cut on one side; with movable pin for attaching it to the dress. See the carefully drawn figure, No. 4.

These four articles were found in the year 1811, in digging a gravel pit opened at the erection of the present Gogarburn House, and a little to the south of it, in the parish of Corstorphine, near Edinburgh.

A somewhat similar Bronze Scabbard Point was found, along with leaf-shaped sword blades, on the farm of Ythsie, parish of Tarves, Aberdeenshire, and was presented to the British Museum by the late Earl of Aberdeen. It is described in the "*Horæ Ferales*" of the late John M. Kemble.

Another was found, along with four leaf-shaped bronze sword-blades and a spear head; on the lands of Cauldhame, near Brechin, Forfarshire, the property of the Earl of Dalhousie. Two of the Sword Blades and the Scabbard are now in the Museum; they were described and figured in the "*Proceedings of the Society*," vol. i. p. 181. For the sake of comparison, the figure of the scabbard point has been repeated here.



Bronze Scabbard Point found at Cauldhame, near Brechin.

A Gold Ornament, somewhat corresponding in character to the one now presented, but larger in size, found in a moss in the West Highlands, along with two gold penannular bracelets, was presented to the Museum by Mr Denny, shipbuilder, Dumbarton, and is described in the "*Proceedings of the Society*," vol. iii. p. 23. Similar ornaments have been found in England and in Ireland.

(3.) By GEORGE PETRIE, Esq., Corr. Mem. S.A. Scot.

Ring of Silver Wire, 1 inch in diameter. Found in excavating the foundation of the "King's Castle," Kirkwall.

Clay Smoking-Pipe, with the usual small bowl of the old clay-pipes. Found in digging in the town of Kirkwall, Orkney.

- (4.) By ROBERT DICKSON, Esq., surgeon, Carnoustie, Corr. Mem. S.A. Scot.,

Bowl-shaped Sepulchral Urn, measuring 5 inches in height, and about $5\frac{1}{2}$ inches in diameter, of yellowish clay, and rudely ornamented with wavy lines of a punctured character. It was found in the parish of Carmylie, Forfarshire, in a short cist, formed of four flat stones, twelve small round stones being placed below it, and a large stone covering the cist above. The urn contained ashes and burnt bones.

Portion of a small cup-shaped Urn of Clay, 3 inches in height. It is ornamented with straight lines and an alternating Vandyke pattern, and was found while levelling a tumulus on the bank of Dighty Water, near Monifieth, Forfarshire. The cup is similar in character to those described and figured in the "Proceedings of the Society," vol. iii. p. 485.

- (5.) By the Misses DICK LAUDER.

Four Polished Celts of fine-grained stone, measuring from 8 to 11 inches in length, and from 3 to $3\frac{1}{2}$ inches across the face. Two of the celts are yellowish in colour, the others are apparently of a dark-green porphyry and basalt.

- (6.) By JAMES SMITH, Esq., Old Bond Street, London.

Tableman, or Whorl, 1 inch in diameter, perforated in the centre, and ornamented on both sides with alternating parallel lines and dots. It was found in the parish of Cruden, Aberdeenshire.

Arrow Head, $1\frac{1}{2}$ inch in length, of grayish-coloured flint, with barbs and stem. Found in a tumulus in the parish of Cruden.

Small square-shaped Token of Lead, with a Cross, and below, the letters I.H.S., said to have been found in the ruins of the old church of Cruden.

- (7.) By D. H. ROBERTSON, M.D., F.S.A. Scot.

Two Bronze socketed Celts, with Loops, one square shaped in the neck, measures $3\frac{3}{4}$ inches in diameter, and 2 inches across the face; the other, rounded in character, measures $2\frac{3}{4}$ inches in length, and 2 inches across the face. They were found, in 1841, in digging near the Citadel, Leith.

Small Iron Key, 4 inches in length, with large heart-shaped Loop or Handle. Found in the old fort of Inversnaid, Stirlingshire.

Ivory Head of a Walking Cane, having cut on it the coronet of a marquis, and below interlaced initials, apparently L.T.D.V.

Chatelaine of jeweller's gold, of three Chains, ending in an ornamental vase, with flowers, and below it, four pendant chains, with swivels.

(8.) By the ARCHÆOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.

Ancient Bone Skate, $9\frac{1}{2}$ inches in length, one extremity being cut to a point. It was found, at a depth of 70 feet, in the parish of St Peter's, at Arches, Lincoln.

Another Specimen, measuring 14 inches in length, pierced with a hole at each extremity. Found, in 1848, at Stixwold Ferry, near Lincoln.

These Skates are usually formed of the cannon bone of the horse.

(9.) By EDWARD BURNS, Esq., Bank Street.

Silver Halfpenny of Edward I. and of Edward III.

Copper Penny of Queen Victoria 1855.

(10.) By GEORGE MOORE, M.D., Hastings (the Author.)

Ancient Pillar Stones of Scotland; their significance and bearing on Ethnology. 8vo. Edinburgh, 1864.

(11.) By the SOCIETY OF ANTIQUARIES OF LONDON.

Archæologia; or, Miscellaneous Tracts relating to Antiquity. 4to. Vol. XXXIX. Part 2. Lond. 1865.

Proceedings of the Society of Antiquaries of London. Second Series. Vol. II. Part 6. 8vo. Lond. 1864.

(12.) By the SMITHSONIAN INSTITUTION, Washington, U.S.

Annual Report of the Board of Regents of the Smithsonian Institution, showing the operations, &c., of the Institution for the year 1863. 8vo. Washington, 1864.

Results of Meteorological Observations, made under the direction of the United States Patent Office and the Smithsonian Institution, from the year 1854 to 1859 inclusive. Vol. II. Part 1. 4to. Washington, 1864.

Smithsonian Contributions to Science. Vol. XIII. 4to. Washington, 1863.

I.

ON THE KYMRIC ELEMENT IN THE CELTIC TOPOGRAPHY OF SCOTLAND. BY THE REV. THOMAS M'LAUCHLAN, LL.D., F.S.A. SCOT.

The topography of Scotland presents us with features sufficiently various. Not more variegated are the colours of its national tartan than are the names which distinguish its localities. In immediate proximity to each other in many districts may be found townships which have been named by different races speaking different languages, and which furnish us with memorials of those races long after some of them, with their languages, have passed away for ever. The study of those names belongs to three different sciences. First, it belongs to Philology. Some of the most interesting and instructive forms which words assume are to be found in their application to topography; and there is, beyond doubt, a large amount of valuable knowledge lying latent beneath those names which the skill of the philologer has still to bring to light. Then, again, it belongs to Ethnology. Names speak of the races that applied and used them. The nations that people a country live in their designations of places, and other objects, long after they themselves have disappeared from the face of the land. The topography of America will long testify to the existence of the perished Indian; and it is doubtful whether the names of places in Britain do not speak of a race or races who once existed there, but of whom there is now no record, either written or traditional. But the study belongs also to the domain of History, in the stricter sense of the term, and in this connection it is that it assumes a higher dignity and consequence than would otherwise belong to it. True, the testimony of topography has not the certainty of written records, but it is as true that it has not their uncertainty either. Names have been exposed to the influence of no passion, and no prejudice in conferring them. So far as they speak, they speak truth—a statement which cannot always be made respecting written documents, which even after they are deciphered are often the mere monuments of the ignorance, the malice, the prejudice, or the partisanship of their authors, and which, in so far as they are so, serve to lead

us away from, instead of guiding us to, the facts of history. It is true that the range is narrow within which topography can be made to testify at all, but within that range its testimony is valuable, and more deserving of being listened to than has often been allowed. Hence the importance of a careful, accurate, and persistent study of the facts with which it presents us.

In Scotland this study is of interest in connection with the questions so long discussed respecting the ancient inhabitants, and more especially those regarding the long rival, but latterly amalgamated, races of the Picts and Scots. The question has been often raised, and by some parties held to be unsettled still, Who were these severally? Some five or six words of the Pictish language have descended to us. Bede tells us that this people had a language peculiar to themselves. Have we any means of knowing what it was? Does the topography of the country help us in the inquiry; and can we from it gather such a vocabulary of the Pictish tongue as will afford anything like certainty in fixing who these Picts were?

In deciding this question, we are brought to deal with one which appears to be justly preliminary to it,—the question of the form in which we are to take the words whose relations we propose to discuss. Whether we are to take these words as they appear now in common usage, or as they appear in such written documents as have come down to us from the past. It is natural to suppose that the history of a word is to be found most accurately recorded in such documents, because that in them we are able to trace it through its different phases, ascending gradually until we reach its primitive and radical form. This may be true in a few cases, but in a greater number there never was a purer delusion. So far is it from being true that modern modes of pronouncing and spelling topographical terms must be corrected by a reference to ancient documents, that the words as written in these are in a majority of cases utterly indistinguishable, except as read in the light of modern usage. It is necessary, at least, as frequently to read ancient topographical terms in the light of modern usage, as modern terms in the light of ancient orthography. It cannot safely be forgotten that a correct or fixed orthography is itself a modern thing. The spelling in the letters of men and women high in social position not a century ago, is such as

would exclude their authors from the lowest government situations to which there is admission by competitive examination nowadays. In the names of places the variations are extraordinary, and quite absurd. Dr Johnson, in his account of his visit to the Highlands, spells the name of the well-known valley of Glenmorrison with two *l*'s instead of two *r*'s. It is not impossible that some ingenious philologer may, a century after this, found some important theory on this striking fact, and point out how rapidly topographical terms undergo great variations. A safer guide, however, is found in the pronunciation of a modern native than in the mistaken orthography of the travelling philosopher. In like manner, it must be borne in mind, that in our ancient historical documents the names of places were written by men who for the most part knew not one word of the languages to which these terms belonged, and it is no wonder that we should so often find in them those remarkable combinations of letters which defy the ingenuity of even the practised reader, and which show how thoroughly at their wit's end were the scribes in representing upon paper sounds which they had barely caught. Modern Anglo-Saxons are not in many respects different from their fathers, and the statement made may be illustrated by a reference to Gaelic names as now written by English or Lowland Scots writers, when unaided by a knowledge of the true orthography.

It may be of interest, while dealing with this question, to refer to the names of some well-known localities in Scotland, and compare the ancient orthography with the modern pronunciation. The most ancient name of the island of Iona, as found in written documents, is *Hii*. With this the modern name, as pronounced by the native Highlander, is identical. Twelve hundred years have made no change in the spoken word. But the written word has undergone a very different fate. Not more various are the hues of the chameleon than are the forms through which it has passed—*Ea*, *Eo*, *Iea*, *Aoi*, *Eyna*, *Yi*, *Hyona*, and various others, of all of which it may be said that they are not of the slightest value, as throwing light on the origin of the term.

In the south of Scotland is the parish of Traquair, a name which finds its representative in the Treguer of Cornwall and the Treguier of Brittany, its English synonym being *The town on the green*. A reference to the charter form of this word is instructive. It appears as *Trequair*, *Tresquere*,

Traverqueir,¹ Trefquer, where the Kymric Tref is unmistakable, and in the year 1150 as Trauequayr, where we reach the pronunciation now in use, and where we learn how steady popular usage in such cases is.

Another name as clearly Kymric as Traquair is that of Tranent. This name appears at an early period in writings as Travernant, a form just such as the Kymric scholar would anticipate. In this latter form the preposition *er* is introduced, making the name "The town on the valley," as in Traverquair; in the former, it is Trenant, as still existing in Wales, "The town of the valley." These are not different names, and there is nothing in the form of the word Tranent to induce the belief that it is more modern than the other.

Among the Western Islands appears one with the English name of Benbecula. The Gaelic name is Beinn nam faodhla, or "The hill of the fords," a name accurately descriptive of the form and position of the island. But how does this name appear in charters? It appears as Beandmoyll, Beanweall, Buchagla, Benvaigha, forms from which it would be well-nigh impossible to extract the real word, and some of which are further removed from it than their modern English representative.

The fair conclusion from these and innumerable similar facts is, that it is upon the whole safer, in our topographical inquiries, to start from modern usage as a basis, while charter forms are to be employed in so far as a rational use of the information they contain may serve to aid in the discovery of the real derivation of names. There is no doubt that in numerous cases such information with respect to earlier forms, and even essential parts of a name, which have in the course of time dropped out of use, is necessary to ensure a historical, and hence an accurate instead of a fanciful, account of our topographical terms. Any one acquainted with Highland etymologies, knows to what an extent our imaginative countrymen have gone in attaching meanings altogether fanciful to such terms; but nothing is more likely to mislead the

¹ Mr Skene, in his paper on the Picts recently published, makes the statement that the form "Traver" does not occur in the topography of Wales. It is equally true that it does not occur in the topography of Scotland, save in some ancient writings. Tranent, Traquair, Troqueer, Traprain, are the Scottish forms. The existence of the "*er*," however, presents no real difficulty.

inquirer than elevating our ancient and irregular orthography to a position which it is altogether unfit to occupy.¹

With these preliminary remarks, the question presents itself, whether and to what extent Kymric words occur in the topography of Scotland; and in examining into it for a little, it may be best to confine the inquiry to what was and is supposed to have constituted the ancient territory of the Picts north of the Firth of Forth. Father Innes, in his "Critical Essay," maintains that such words largely exist; he is supported by Chalmers in his "Caledonia," with an amount of labour and erudition which, notwithstanding all that has been said, and often unjustly, to weaken his authority, entitles his opinion to high respect. Mr Taylor, in his work on "Words and Places," maintains the same view, and does so with learning and caution, notwithstanding some mistakes into which he has been led. Nor is it easy to see how the view can be impugned in accordance with the clear and convincing facts of the case.

In the county of Denbigh, in North Wales, lies the vale of Clwyd, intersected by the river of the same name. In the west of Scotland lies another vale of Clyde, with another river of the same name. If we are asked to account for the identity of the names, we are most likely to reply that they were in both instances given by the same people; and in this case history warrants the conclusion, for it informs us beyond a question that both valleys were inhabited by a Kymric population. There is a Clody in Ireland, which Mr Ferguson, in his "River Names," and Mr Taylor both make identical with Clyde; but as there is a village of the name of Clody on the banks, the source of the name is sufficiently obvious. The only name in Ireland apparently the same, is that of the

¹ A case in point may be found in a word referred to by Mr Skene, in his recent paper on the Pictish language, &c. He quotes the opinions of Statistical Account writers on the origin of the word Elie, in Fife, and tells us it was anciently spelled Chellin. This does not aid us in discovering the etymology of the word, however. But we know that in Gaelic topography "An fhaoluinn" means *The sandy beach*. There are several places so called in the West Highlands. This is the real meaning of Elie, as is proved to a demonstration by the fact that the English name retains usually the article, "The Elie." Here the "n" of Chellin is accounted for, but the "ch" is a miswriting or a misreading, either of which is possible. "Fhaoluinn" is pronounced "eulin."

Glyde, in the county of Louth. If this be the same, it is important to observe that it appears in that part of Ireland said to have been occupied by a Pictish population.

To the north-east of the Clwyd, and sweeping the confines of Wales, we find a river bearing the name of Dee. Entering Scotland, a river bearing the same name meets us in the Stewartry of Kirkcudbright. We find no difficulty in accounting for this, when we note the numerous Kymric names in the surrounding country, from Penpont, Ecclefechan, and Cummertrees on the east, to Ochiltree on the west. But a river of the same name occurs in Aberdeenshire. Are we not justified in concluding that the people who gave the name in the other two cases gave it in this case also? But we cast our eye over the map of Ireland, and the purely Gaelic region of Argyle, and we find a "Dee" only in the county of Louth, and alongside of the Glyde already referred to. Its existence may be attributed to the same cause with the latter, and is, therefore, to be traced to a Pictish source.

In the county of Glamorgan, in Wales, we find the river Nith—a name said by high Kymric authority to be derived from the Kymric word "*Nedd*," *anything that twists or curves*. Entering Scotland, we find, as in the former case, a "Nith" in Dumfriesshire, and we find a Nethan in the purely Kymric district of Strathclyde; these names are easily accounted for, occurring as they do in what were unquestionably Kymric districts. But then we find a Nethy in Perthshire, and another in the county of Moray; so that from Glamorgan to Dumfries, and thence to the Moray Firth, along the east coast of Scotland, we find this name extending. At the same time, no similar name occurs in the whole river nomenclature of Ireland and Argyle.

There are three Calders in England, one in Strathclyde, and a large number in the Pictish part of Scotland; and this name continues the same, notwithstanding any changes that may have occurred in the spoken language of the several sections of the country where the word occurs.¹ But neither Ireland nor Argyle yields one.

¹ It has been urged that the phonetic mutations which distinguish languages must be sought for in topography. This principle has recently been pressed far beyond its legitimate limits. It is true that it is found to operate within the range of topography, as in the case of the Roman *v* representing the Kymric *gw*, and the

So with mountains. The word "Ochil," applied to the range of hills north of the Forth, is decisive. We have the Gaelic equivalent for the word "Ochil" in "uasal;" but Ochil is a distinctly British form, and it is only necessary to look into the oldest MSS. of both Gaelic and Kymric to see that these distinctions have suffered little modification within the historical period. If we give up "Ochil" as applied to the hills referred to, we must give up "Ochil" in the term "Ochiltree," which is as pure Welsh as if the language were spoken in the parish at this day. It has been said that because the geographer of Ravenna mentions "Cindocellum" as a town in Scotland, that therefore "Ochil" must be Gaelic. A single glance at what the geographer says, and a perusal of the names of the accompanying towns, such as Jano, Maulion, Demerosesa, Cermo, will suffice, I presume, to show how very narrow a basis such an inference is made to rest upon; besides that "cwn" is as much British, as "ceann" is Gaelic, for *head*.

The Scottish Lomonds are, beyond a doubt, from the same source with the southern Plinlimmon. It has been said that the Lomond in the case of the Scottish Lomond is merely a hardening of the Leven, applied to the river and lake, which, curiously enough, flow and lie at the base of two of those Lomonds. But there are Levens where there are no Lomonds; and these are in Argyle, showing that in all likelihood the name Leven, in the east, being Gaelic, is of later application than Lomond. A Ben Lomond, near Dumbarton, the capital of British Strathclyde, need create no surprise, as the British tongue must have been spoken around its base; but what is true of that Lomond must be equally true of those in Fife. Lomond, in Welsh, has an intelligible meaning—a *beacon*.

pure *l* of the Saxon representing the aspirated *l* of the Welsh. But there is nothing more likely to lead to error than the application of this principle uniformly in analysing topographical terms, especially in languages where the same organs are similarly used in enunciating words. An illustration of this may be found in the numerous Gaelic names which pervade the Scottish Lowlands, and which, as spoken by the Teuton for three hundred years, are identical with the same words as passing through the throat of the most guttural-speaking Gael. Such a word as Balmaghie, in Kirkcudbright, which, if assuming the Saxon accent, would be Balmaghie, is still even as to accent thoroughly Gaelic.

On the subject of the "Abers," which are said lately to be common to the British and Gaelic dialects, it is remarkable that such a statement could be made in the face of the fact, that while Wales yields so many instances of the use of the word, Gaelic Argyle does not yield one. A few cases in Ireland may be accounted for by the existence of a Pictish people there. Such cases are, however, by no means well authenticated, and, in the meantime, speculations upon the source and relationship of Inver and Aber must yield simply to the logic of fact.¹

Names of places give the same testimony with names of rivers and mountains. Thus in Brittany, we find Ruan the modern Rennes, and Rohan; a little to the north of these is Rouen, on the Seine. In Wales, we have Ruthin, while in Pictish-Scotland the Ruthvens are numerous, but none occur in Ireland or Argyle. Nor can changes in the spoken language have affected this word. In Wales we have Llanerch; in Strathclyde, Lanark and Drumlanrick; in Pictish-Scotland, Lanrick. No such name occurs in Ireland or Argyle. In Brittany we have Gouerin; in Montgomery, Gower; the Carse of Gowrie, and relative terms, will at once occur to the Scot. The word is a British one, derived from verdure, and retains to this day its British form, although there is a Gaelic form of it—"Feur," *grass*—following, as might be expected, the principles that govern Gaelic enunciation.

Two "Tres" exist on the banks of Lochness. If these be not Kymric, what are they? And there is not one in all Argyle, or in Ireland. But it is needless to dilate. An induction of facts in topography makes it clear that the names in the Pictish portion of Scotland differ from those of Ireland and Argyle, and in the measure in which they do so that they approach the Kymric. Such words as "Pit" or "Pitten," and "For" or "Fother," which appear to be characteristic of Pictish topography alone, do not affect this conclusion in the least, although they serve to prove that the Pictish language had its own distinctive features.

¹ It is worthy of notice, that the generic "Aber" is in Scottish topography found uniformly associated with specific terms purely Kymric; as Aberuchill, Aberchalder, Aberarder, Aberdour, Aberbrothock, Aberdeen, Aberchirder, Abernethy. That "Inver" should be associated occasionally with Kymric terms is nothing to the purpose; but it is to the purpose that "Aber," the Kymric generic term, should never be associated with a Gaelic word.

A more general reference might have been made in this paper to that read by Mr Skene, last April, before the Royal Society of this city, and since then published in their *Transactions*, in which he takes a somewhat opposite view; but two papers published by him since that time in the "*Archæologia Cambrensis*," as preparatory to that paper, which appears in the same publication, render it almost unnecessary. In the latter of these Mr Skene says, "From these examples, Pictish appears to occupy a place between Kymric and Gaelic, leaning to one in some of its phonetic laws, and to the other in others." Having taken the liberty of propounding this theory some time ago, I feel much fortified in maintaining it by such authority as Mr Skene's, even although he does say that the language inclines more to the Gaelic than to the Kymric. I called it Gallo-cymbric, which did not imply an opposite view. But I find a difficulty here. Mr Skene says, in one of his papers, that "The generic terms (of the Pictish language) do not show the existence of a Kymric language north of the Forth." Now these two statements hardly consist. If the language had a large admixture of Kymric elements, which I do not wonder that Mr Skene, as a scholar, is ready to admit, how is it possible that they do not exist in its generic terms, as exhibited in the topography?

But while referring to the question as one bearing on the races who first peopled Scotland, for it comes finally to resolve itself into this, I cannot but regret the continued mistranslation by recent writers of an important Latin quotation—perhaps the quotation most relied upon by historians in forming their views of the ancient inhabitants of Scotland, into which one of those actually introduces a hyphen of his own devising, in order to make his interpretation sure. The passage is the famous one respecting the "*Scoti vagantes*," from Ammianus Marcellinus. I quote it from the "*Monumenta Historica*," whose editors have used the best edition of their author in furnishing it to their readers. It is as follows:—"Illud tamen sufficiet dici, quod eo tempore Picti in duas gentes divisi, Dicaledonas et Vecturiones, itidemque Attacotti, bellicosa hominum natio, et Scotti, per diversa vagantes multa populabantur." The meaning of this passage is illustrated by a previous one from the same author, where he says "*Picti Saxonesque et Scotti, et Attacotti, Brittanos ærumnis vexavere continuis*," the real meaning being

that the Picts, Attacots, and Scots, wandering through the Roman province, committed great depredations. Why the "vagantes" should have hitherto been taken to qualify the Scoti merely, is not easily seen, but the perpetuation of the mistake should surely be avoided. With the fall of this famous passage from its unwarranted position in our national literature, falls many a bulky theory, and many a baseless inference in our early history. If the Scots were wanderers in the Roman province, so were the Picts—a very likely statement. Such, at least, is the real statement of the Roman historian.

II.

NOTICE OF CAIRNS, CALLED "FAIRY KNOWES," IN SHETLAND,
RECENTLY EXAMINED. BY D. D. BLACK, Esq., F.S.A. Scot.

On the lands of Kergord, in the parish of Weisdale, or rather in the united parishes of Tingwall, Whiteness, and Weisdale, and county of Zetland, there were a number of circular or nearly circular gatherings of small stones, called by the inhabitants "Fairy Knowes." Most of these knowes have been removed in the course of the improvements made during the last half century. Two, however, still remain—a small one on the farm of Stensell, at the top of Weisdale Voe, or arm of the sea; and the other, or larger knowe, on the farm of Housegord, about a quarter of a mile farther north. Each of these knowes is composed of small stones of irregular shape, from two to six inches in length and breadth, and from an eighth of an inch to half an inch in thickness, apparently sandstone gathered from the land and from the small river, the Weis, which flows through the valley. There is abundance of limestone in the valley cropping up in all directions, and especially standing in vertical strata immediately adjoining the two knowes spoken of; but no limestone is found in any of the knowes, which are composed of sandstone only (composite with mica), covered over with the mossy soil of the valley, and overgrown with grass and wild flowers, especially primroses. The smaller knowe may be four or five yards in diameter, the larger six times this size. The walls or sides of the knowes slope both externally

and internally on the natural slope of an angle of about forty-five degrees ; the knowes are longest from north to south ; at the north end the walls fall away to nothing ; at the south end there is something like an entrance obstructed by a stone, of some three feet by eighteen inches. As already said, the sides of the knowes are overgrown with grass and wild flowers ; the centres are the same. This summer (1865) a few members of the Anthropological Society visited Weisdale, and examined the knowe at Stensell. It is believed they found nothing. Since then the centre of that knowe has been dug into, but under the turf nothing was found except the natural soil. Some of the stones forming the walls of the knowe had years ago been removed by a previous tenant, who, however, declared that he found nothing except small stones, most of which he said were blackened as with fire. The members of the Anthropological Society are understood to have been under the same impression, that some of the small stones had been subjected to fire. The workman who aided the society was desired by the writer of this to pick out from this small knowe at Stensell, and from the larger one at Housegord, stones which *he* conceived had been blackened by fire. These stones thus picked out were washed with soap and water and a brush, and readily gave off most of their colouring matter, which seemed to be nothing else than the vegetable moss or peat in which the stones had been imbedded. The stones were broken with a hammer, and were found to have no marks of discoloration in their centres. In the smaller knowe at Stensell, then, nothing has been discovered ; but in the larger knowe at Housegord, the fragments of a well-burnt urn were found, some three years ago, by the tenant when removing some stones from the west side of the knowe. Amongst these fragments there were two pieces of slate stone, which must have been imported, as no slate is found in the valley ; there was, further, found a small piece of oblong sandstone pierced with a hole at one end, and differing in quality from the stone of the valley ; and there was likewise found a pretty large glass bead, blue striped with white. It is hard to say if these articles had any connection the one with the other, but they were all found at the same place. No bones or dust were noticed, but what appears to be a calcined bone was found. Since then this knowe has remained undisturbed. The urn, the slate stones, the bead, the calcined bone, and the oblong stone, are sent

herewith; and also one of the stones composing the Fairy Knowes, as a specimen of the stones of which these knowes are formed.

About a mile north from Housegord, on the northern part of the cultivated lands of Kergord, on a farm which has the modern name of Flemington, a field rises by a gentle ascent in the middle of the valley. This field is in potatoes this year. When furrowing up the potatoes early in the season, the plough struck on a slate stone. The ploughman, who had been instructed to be careful in case of any discoveries, removed the stone, or rather stones, for there were two slate stones, the one above the other, although there are, as already said, no slate within many miles of Weisdale. Below the stones the ploughman found an urn full of bones. He replaced the stones, leaving the urn untouched. But the news got abroad; the urn had many visitors, and most of the bones were removed. In June the proprietor visited the place, and he found everything intact, except that most of the bones had been removed. The ground round the urn was then carefully dug out, when the urn was seen to be placed in a hole of pure virgin earth of coarse red clay. The urn seems to be composed of similar clay, and was placed nine inches in depth below the surface of that soil which had been disturbed by the plough. The urn was measured before being exhumed: it was circular, ten inches in width across the mouth, and fifteen inches in height. The mouth was a little jagged as from accident; there was a round hole in the bottom. There was no stone below it, nor any dark-coloured matter below or near it. The top of the urn when first seen and the sides of it, when the earth was removed, were red. They got darker by exposure to the air. The bones and dust in the urn were clean. Every care was taken to remove the urn entire, but it was impossible to touch it without breaking it; the clay seemed to have been ill burned, and, in fact, felt as if it were rotten. The urn was removed piecemeal, packed amongst wool, put in a warm place to dry gradually from the heat of the sun, and is now, along with some of the bones found in it, sent herewith. This urn seems to be inferior in composition to the one previously discovered, but both have the common zigzag marks upon them. Where this urn was discovered is the highest point of land in the valley, which is fully a mile wide, from the top of one hill to the top of the other hill; and the place where the urn was found is about a quarter of a mile from the east

hill, and an eighth of a mile from the west hill, the valley running north and south. The field where the potatoes are has been long in cultivation, but an old man says he recollects of a tumulus or fairy knowe in the field, and, as he thinks, on the exact spot where the urn was found.

So far as the writer is aware, no urn has ever previously been discovered in Zetland, at least he has not been able to hear of any such discovery.

It may be proper to add, that in August last the hole in the potato field where the urn had been discovered was excavated to a further depth, and the ground round about cut away, but nothing whatever was found except the original soil.

Along with this is also sent a stone hammer of a small size, found this summer on the farm of Scarpiegarth, which is on the east side of the hill immediately west of Housegord; and is now presented to the Museum, along with the remains of an urn, bead, &c., found in the Fairy Knowes.

III.

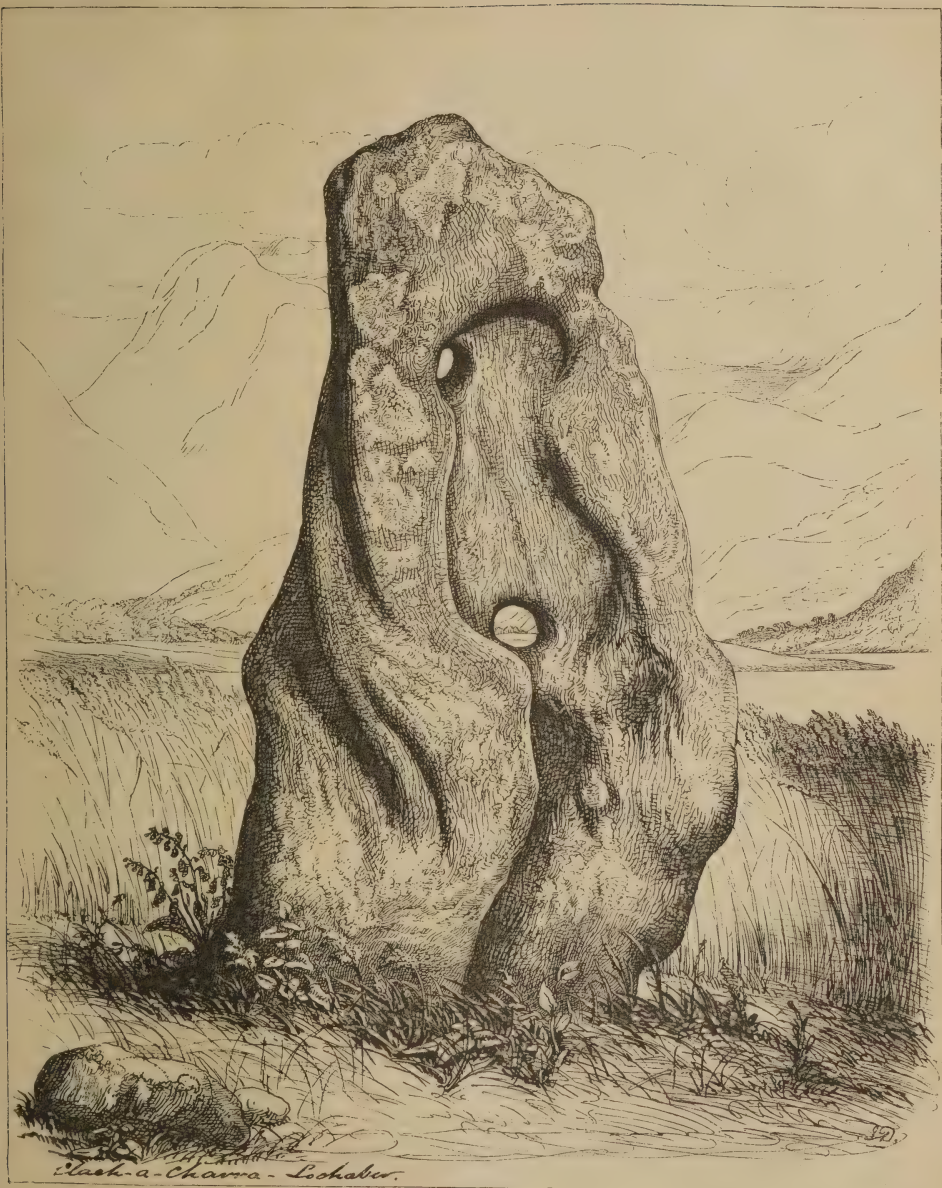
NOTES OF VARIOUS ANTIQUITIES IN ROSS AND SUTHERLAND. BY
THE REV. JAMES M. JOASS, CORR. MEM. S.A. SCOT., IN A LETTER TO
JOHN STUART, ESQ., SECRETARY.

The first of these related to the lower part of a sculptured pillar in the churchyard of Edderton, which was buried in the ground when a drawing of the monument was made for the first volume of "The Sculptured Stones of Scotland." In consequence of the notice there given of the partial appearance of figures at a former time, it has been recently disinterred, and found to have sculptures on it of two horsemen armed with swords, spears, and round shields—the figures of both men and horses having the peculiar contour of those on the cross-slabs on the north-east of Scotland. Mr Joass next described various groups of incised cups and rings which he had found on stones in Ross-shire, and the occurrence of cups on a pillar in a double stone circle at Beaufort. It appears that on almost every southern moorland slope there occur groups of circular hut foundations, surrounded by, or in the neighbourhood of, numerous sepulchral cairns; and that many curious undisturbed remains yet await the careful examination which they deserve.

IV.

NOTICE OF THE CLACH-A-CHARRA, A STONE OF MEMORIAL AT ONICH, IN LOCHABER. BY JAMES DRUMMOND, Esq., R.S.A., F.S.A. SCOT. (PLATE XIX.)

At a meeting of the Society of Antiquaries in February 1863, an interesting paper was read by the Rev. Mr M'Lauchlan on certain standing stones in the island of Mull, traditionally said to have been erected, not as memorial stones, but as direction posts to the ferry for Iona. This has been so far confirmed by the fact, that some of them having been thrown down, nothing was found to indicate a place of burial. A tradition of the same sort seems at one time to have existed in East Lothian, in reference to a series of standing-stones, a few of which only now remain. These, from their position, were supposed to show the way to Edinburgh: unfortunately for the tradition in this instance, there seems no doubt that originally they were memorial, whatever use they may latterly have been applied to. The first of these is one between Dunbar and the village of Spott. Towards the end of last century, during farm operations the workmen came upon a perfect cemetery of rude stone-coffins, so many that a number of the farm-yards in the neighbourhood were paved with the large flags of which they were made; but whether urns or other relics were found in the graves I could not ascertain, although many urns have since been found in this neighbourhood. In the middle of this field of the dead stood the monolith alluded to. A few miles further west, under the shadow of Dunpender, an ancient British fort, stand two more of those stones, near which graves have been found; the opening of one of these will be in the recollection of some of the members of the Society who were present on the occasion. Then there stands another in a field at Athelstaneford, having its tradition; and no doubt many more have been destroyed. In our own immediate neighbourhood we have many such standing-stones, the largest and most important of these being the Caiy-Stane; and near this, at one time, stood the Camus-Stane, which was ruthlessly broken up some years ago for road-metal. There



Phototyped by Messrs Nelson,

THE CLACH-A-CHARRA, A MEMORIAL STONE AT ONICH, LOCHABER.

is one in the grounds at Morton Hall and another near Craigmillar Castle. In passing, I may mention a carved stone built into the wall of a farm-house near this, representing a castle, and between the towers two shields of arms very much defaced; it is said to have been taken from a hunting seat of one of the Jameses in this neighbourhood. The Buck-Stane is built into a wall by the roadside near Morton Hall, which, on a close examination, is evidently the remaining portion of a wayside cross. And there is the well-known Bore-Stane, now preserved on the top of a wall at Morningside; this, I need scarcely mention, is the stone on which was planted the banner of James IV. as the rallying point for his army, on the Borough-Moor, previous to the disastrous battle of Flodden. Wherever one goes such stones are found, some with traditions, but the greater majority without.

In the parish of Lumphanan, Aberdeenshire, is a very interesting stone, or rather rock; here it is said Macbeth, when mortally wounded, rested, previous to taking refuge in the Peel Bog, where he died; his cairn is not far from this. Near Finzean House is one called Dardanus' Stone, and in a field close by is an immense cairn raised to the same. Some of these early monoliths, however, have a tradition attached to them of a comparatively modern date. A striking instance of this is the "Tombh Clavers," at Killiecrankie, now so called from being near the spot where Graham of Claverhouse, Viscount Dundee, was killed in 1689. But all stones of this class are not consequently of prehistoric times, so to speak; for had we not only the other day, a stone erected by "The Men," to commemorate the miraculous parting of the waters of the Spey, that the body of "a certain woman" might be carried across to her last resting-place?

But the stone to which I wish particularly to call attention is the "Clach-a-Charra," at Onich, in Lochaber. About the meaning of this word there are differences of opinion. The Rev. Mr Stewart, minister of the parish, writes me: "It is difficult to translate literally into English, but which means, as nearly as possible, The Stone or Pillar of the cunningly-carried-out-reprisal." Others again say that it means the "Stone of Retribution or Vengeance;" while some one, who seems to know his Gaelic well, writing a notice of it in the "Inverness Courier," says the word simply means "the Stone Pillar, Obelisk, or

Monolith." In connection with this stone there is a very remarkable tradition—so remarkable, in fact, that although first told me by the Rev. Mr Stewart, I made inquiry in various quarters to ascertain whether it was known *away* from its own immediate locality. On asking Dr MacIntyre of Fort-William if there was any tradition in connection with this stone, he related the same story, and moreover stated, that from his earliest years he had heard no other. On applying to the Rev. Mr Clark of Kilmalie, who is deeply versed in such matters, he gave the same tradition "as all he had ever been able to gather about it." As his version is shorter than the others, I give it. Comyn, the last Lord of Badenoch, and his two sons, having been present on the occasion of the marriage of the three daughters of one of his clansmen, wished to enforce the savage privilege of the *mercheta mulierum*, handing over the others to his sons. The clansmen very naturally rose in arms against this monstrous oppression. Comyn and his sons fled. The young men were overtaken and killed; but the father escaped, and wandered as far as Strath-Erick, where, after ascending the long slopes above the River Dee, he seems to have died of exhaustion, the name of the place being since "Sindhe Chuimein," or Comyn's Seat. He was buried at Fort-Augustus, the Gaelic name of which is "Cill-a-Chuimein," or "burial-place of the Comyn." I should mention that Mr Clark thinks the Comyns had nothing to do with it. A tradition such as this is valuable only when it accords with other known historical facts; in the present instance, as far as the *Comyn and his two sons* are concerned, it must fall to the ground, the genealogy of the Lords of Badenoch of this name being well known. The first was Walter, who, marrying the Countess of Menteth in 1231, became Lord of Badenoch, and dying without issue in 1258, was succeeded by his nephew John, called the Black; he was succeeded by his only son John, called the Red Comyn, who was stabbed by Bruce in the convent of the Minorite Friars at Dumfries in 1305; he again was succeeded by his only son John, who died without issue in 1325-6. The name of the place where he is said to have died, and the name of the church or burial-place—Killie Cumine, or Church of St Comghan of Ardnamurchan, of the Scottish and Irish Calendars—being somewhat similar in sound, no doubt, suggested the Comyns in connection with the tradition, that family having at one time been the lords superior of the dis-

trict.¹ In this opinion the Rev. Dr M'Lauchlan and other authorities quite concur. Many objections, no doubt, will be started to this strange tradition, which I have given as related to me; yet, with all the objections which may be stated against it, the very existence of such a tradition in such a locality is extraordinary. It is not my intention to enter into any discussion upon this vexed question, as to whether this law was ever enforced in its more barbarous form, or was a mere tax payable on the marriage of a daughter; if the former, it would appear, even at this early time, to have been in disuse, as the very proposal was considered so offensive, that nothing less than blood could efface the insult. Moreover, if the tradition is founded on fact, it would require no great stretch of imagination to suppose that the usual tax, whatever that may have been, not being forthcoming, the chief made the proposal which ended so tragically. There is also a superstitious tradition in connection with this stone, of a class common in many countries. I was told in all seriousness by a brother of the farmer, that on one occasion it was taken up to form a bridge over a small stream in the neighbourhood; the workmen in the morning found it gone, having of its own accord wandered back and taken up its own position,—putting one in mind of the Santo Bambino, which was sacrilegiously stolen from one of the sidechapels in the Church of Ara Coeli, but was found in the morning in its own blessed niche, having miraculously walked back through the night for the edification of the faithful and the benefit of its priestly guardians. The height of the stone is 6 feet 8 inches, its greatest breadth 3 feet 10 inches. I am sorry to see that my friend Dr

¹ When the tradition was first mentioned to me, I suggested, in connection with the name "Killie Cumine," the possibility of a church and a saint, but my informant scouted the idea, never having heard of such a saint. Afterwards, when writing him, I mentioned St Comghan or Cumine, and other early ecclesiastics of the name, who might either have built the church, or after whom it might have been called, and also told him of the genealogy of the Comyns of Badenoch; but to no effect: he, like the *Inverness Courier* correspondent, standing up for the Clach-a-charra and its tradition,¹ in defiance of facts, "as a monument erected to perpetuate the memory of a deed that at once hurled a petty tyrant from his usurped lordship of Lochaber and Badenoch"!

¹ "Probably," he writes me, "about the time of the Red Comyn."

Wilson has ranked this among the class of perforated standing-stones, having traditions connecting them with Pagan rites and superstitions, from there being two small weather or water-worn holes through it, of about $2\frac{1}{4}$ inches diameter, which, when the stone was first erected, must have been much smaller if there at all; however, I am certain that had Dr Wilson described the stone from personal observation he would not have expressed such an opinion.¹

I would allude to another standing-stone in this part of the country—at the head of Loch Sunart—which having been used for a practical purpose, had its name changed to “Clach Brangais,” or Stone of the Branks or Jougs, the staple and part of them still remaining, as we find on the pillars of all our market-crosses.

MONDAY, 12th February 1866.

DAVID LAING, Esq., LL.D., Vice-President, in the Chair.

The Right Hon. Lord Lovat, having been duly proposed and admitted, the following Gentlemen were at the same time balloted for, and elected Fellows of the Society:—

BRUCE A. BREMNER, M.D., Edinburgh.

JAMES T. IRVINE, Esq., Architect, London.

JOHN LINDSAY, Esq., Woodend, Almond Bank, Perth.

WILLIAM REID, Esq., W.S., Edinburgh.

ALEXANDER WHYTE, Esq., Accountant, South Queensferry.

The following Donations to the Museum and Library were announced, and thanks voted to the Donors:—

(1.) By the Rev. GEORGE MURRAY, Manse, Balmaclellan.

Large Stone Hammer, 3 inches in thickness, broken across at the perforation for handle. It was found in the parish of Balmaclellan, Galloway.

Winged Celt or Palstave, $3\frac{1}{2}$ inches in length, of yellowish coloured bronze, found in the parish of Dalry, Kirkcudbrightshire.

¹ Prehistoric Annals of Scotland. By Daniel Wilson, LL.D. 1863.

- (2.) By Sir DAVID BREWSTER, K.H., F.R.S., Principal of the University of Edinburgh.

Iron oblong-shaped Padlock, 3 inches in greatest length, with hasp, much corroded. It was found in an artificial cave or "Eirde-house," in the parish of Alvey, Inverness-shire. A note respecting the discovery of the cave was communicated to the Society by Sir David Brewster, in February 1863. (See *Proceedings*, vol. v. page 119.)

- (3.) By A. CAMPBELL SWINTON, Esq., F.S.A. Scot.

Admission Ticket to "Shakespears Jubilee, the 6th and 7th of September, at Stratford-upon-Avon. This ticket admits one on the 6th to the Oratorio. The Dedication Ode. The Ball. And to the great Booth at the Fireworks. One Guinea. (Signed) Geo. Garrick. No. 182."

The ticket shows on the left side a figure of Shakespear leaning on a pedestal. In his left hand he holds a scroll, and with the right points to the inscription thereon—"The man that hath no music in himself is fit for treasons," &c. Encircling the head is, "We ne'er shall look upon his like again."

Silver Medal of the Shakespear Jubilee. Ob. Bust of Shakespear looking to right, "WE SHALL NOT LOOK UPON HIS LIKE AGAIN." Rev. "JUBILEE AT STRATFORD IN HONOUR AND TO THE MEMORY OF SHAKESPEARE. Sept. 1769. D. G., Steward." The ticket and medal were used at the Jubilee by the grandfather of the donor.

Men of the Merse; a Lecture. By A. Campbell Swinton. 12mo. Privately printed. Edin., 1858.

- (4.) By Mr D. MACPHERSON, Thistle Street.

Steel Watch-Seal, with ornamental open cut handle, and shark's skin Case. On the face of the seal is incised the armorial bearings, crest, and supporters of the Baronets of Ross of Balnagowan, Ross-shire.

- (5.) By Mr W. T. M'CULLOCH, Keeper of the Museum.

Silver Watch-Seal with open worked handle. On the face is displayed the armorial bearings and crest, apparently of a family of Carletons, an old family in Cumberland carrying these charges, except the helmet, which has probably been assumed by some cadet as a difference. Another branch of the family settled in Ireland, and a descendant was created

Lord Dorchester in 1786. The seal was said to have been found some years ago in digging near the harbour at Leith. From the style of art it may have been made towards the end of last century.

(6.) By KENMURE MAITLAND, Esq., Sheriff-Clerk of Mid-Lothian.

Arrow Heads of Obsidian, varying from $1\frac{1}{2}$ to $3\frac{1}{2}$ inches in length; and three core-like portions of Obsidian, varying in length from $3\frac{1}{2}$ inches to 5 inches—they are chipped all round; irregularly-shaped portion of Obsidian, $2\frac{1}{2}$ inches in length, bearing a rude resemblance to the upper part of a human figure, probably an idol.

Stone semi-globular Button or Tableman, $1\frac{1}{2}$ inch in diameter, ornamented with a regular incised pattern, and pierced with a hole through its centre.

(7.) By ADAM DAWSON, Esq., F.S.A. Scot.

Two iron Spear-heads, with sockets for attaching them to the handles. One is leaf-shaped, and measures $7\frac{1}{2}$ inches in length; the other is 11 inches in length, the blade is broadest below, and tapers to a point above. The spear-heads were found in digging a drain in the native forest on a coffee plantation in Ceylon.

(8.) By D. H. ROBERTSON, M.D., F.S.A. Scot.

Two Human Skulls, found in digging at the Citadel, Leith.

(9.) By MISS SOPHIA J. HOPE VERE of Craigie Hall, through Professor Sir J. Y. Simpson, Bart., V.P.S.A. Scot.

Four portions of Plaster, showing traces of red and green colour, from the walls of a Roman villa excavated at Seavington, Somersetshire, and collected by the donor; also two portions of Mosaic Pavement, one composed of red brick tesserae, the other of small white and black stones; a separate Tessera; an Oyster Shell; portions of Red Brick Tile, marked with crossing lines; small Brick or Tessera; portion of Clay Pipe or Spout, and portion of a Bone found in the same excavation. Miss Vere accompanied the donation with the following notice:—

“The Remains of the Roman Villa at Seavington, Somersetshire.

“The locality has long been known to antiquaries as one exceeding rich in the buried treasures of the past. The site of these newly discovered ruins commands a view of Ham Hill (the great local Roman sta-

tion), and is placed directly upon the line of the Fosseway, which was the great ancient road from Bath and Ilchester to Petherton Bridge, Dinnington, and Windwhistle to Axminster, where it joined the Skeneld Way, which came from Norfolk through Dorchester and Bridport. Roman coins appear to have been scattered almost broadcast about the neighbourhood.

"The field in which the villa was found forms part of a farm belonging to Earl Poulett.

"As regards the remains already disclosed, they reveal, at the distance of about two feet below the surface of the soil, a space measuring about 30 feet by 20, which is evidently the remains of a portion of an extensive residence inhabited some fifteen centuries ago by a Roman gentleman who had brought with him to conquered Britain the luxurious habits of his countrymen. The by no means careful excavators have revealed the ground-floor of at least one large room and a passage, or an ante-room, covered with mosaic pavement composed of the usual tesserae, of regular design, and formed of about 12-inch squares of red, white, and blue, with flues underneath, as usual (a hypocaust), for the Romans heated their living rooms from below. The tesserae are coarse and rather large, but smaller and more elaborate ones have been found in fragments, as if to indicate that the remains of the principal apartments are still buried beneath the soil. Portions of the walls are visible, and the stucco with which they were ornamented still shows the pattern and colours almost as fresh as when first laid on. Fragments of roofing tiles are also in profusion. These tiles were evidently formed of blue clay resembling that found in the neighbourhood of Westport, for the fire with which they were burnt has reddened the surfaces only. Large quantities of ashes have been carted away—the contents, perhaps, of the ash-pit, with oyster-shells and other culinary tokens. There were also fragments of crockery, an iron chisel, an ivory pin, and a great number of bones, apparently those of human beings, including the almost perfect skeleton of an infant."

(10.) By D. H. ROBERTSON, M.D., F.S.A. Scot.

Great Britain's Coasting Pilot, being a new and exact Survey of the Sea-Coast of England and Scotland, the Scilly Islands, and Orkney and Shetland. By Captain Greenville Collins. Large folio. Lond. 1776.

(11.) By GEORGE CORSANE CUNINGHAME, Esq., F.S.A. Scot.

Blazons of the Ensigns of Britain and Armorial Bearings of the Nobilitie of England, Scotland, and Ireland, MS., with coloured Plates, supposed to be in the handwriting of Alex. Nesbit, the author of "A System of Heraldry," first published in 1721. 12mo. Circa 1700.

A MS. "List of Persons concerned in the Rebellion, either as Principals or as aiding and assisting the Rebels, within the various ports of Scotland, copied from the papers furnished by the officers of the Ports, and delivered agreeable to the Lord Justice-Clerk's directions." MS. folio. May to July 1746.

The volume contains reports from the ports of Leith, Dundee, Montrose, Glasgow, Port-Glasgow, Ayr, Irvine, Greenock, Aberdeen, Anstruther, Stranraer, Kirkcaldy, Banff, Peterhead, Fraserburgh, Stonehaven, Dumfries, Borrowstounness, Prestonpans, Wigtown, Campbelton, Orkney, Perth, Inverness, Lochbroom, Thurso, and Kirkcudbright.

(12.) By the Right Hon. the LORD PROVOST, MAGISTRATES, and COUNCIL of the City of Edinburgh.

Report on the Sanitary Condition of the City of Edinburgh, with relative Appendices, &c. By Henry D. Littlejohn, M.D. 8vo. Edin. 1865.

(13.) By JAMES STUART, Esq., the Author.

Historical Sketches of the Church and Parish of Fowlis Easter. 12mo. Dundee, 1865.

(14.) By J. R. APPLETON, Esq., F.S.A. Scot.

Notices of the Family of Evans. 4to (pp. 24). Newcastle, 1864.

The following Communications were read :—

I.

AN ACCOUNT OF EXCAVATIONS IN CAIRNS NEAR CRINAN. BY THE REV. WILLIAM GREENWELL, M.A., CORR. MEM. S.A. SCOT. COMMUNICATED BY JOHN STUART, Esq., SEC. S.A. SCOT. (PLATE XX.)

There is no part of Scotland which possesses more remains of interest, connected with its early inhabitants, than that district of Argyleshire

which borders upon the Crinan Loch, and is included within the parishes of Kilmartin and Kilmichael. The signs of early occupation are numerous, and it also appears to have been the centre round which the religious associations of the neighbouring people were drawn; for I cannot but regard the series of standing-stones, three of which still remain, as places of religious and perhaps political assembly. The very large number of cairns and other places of interment seem to point to some sacredness in this locality, just as, about the great circles of Avebury and Stonehenge, the barrows have gathered in more than ordinary numbers. Some persons, and amongst them many whose opinion is of great value, are, I am aware, in favour of the theory that all circles and standing-stones are nothing more than the distinguishing marks of places of burial; but to many of them I do not hesitate to attach a still more sacred use. It cannot be denied that burials are found associated with all, even the large circles and series of standing-stones; but this is nothing more than what has occurred in Christian times, when the dead were laid beside, and even within the church. At the same time, I am quite willing to grant that the smaller circles, which enclose one or more sepulchral deposits, in urns or cists, are nothing more than the fence which made sacred the space within, and that they answer to the ring of stones¹ or earth, which so often encircles a tumulus. Nor do I deny that many standing-stones are simple memorials of the person who lies buried beside or beneath them.

As I have said above, three series of standing-stones still remain in this district, and in each case the series consists of seven stones. One series, upon Largie farm, about a mile south of Kilmartin, has upon two of the stones a great number of the small pits which are found so often associated with the concentric circles. In one case a pit is surrounded

¹ It has been conjectured that the circle of stones round the base of a tumulus is merely placed there to support the sides. This view is, however, quite untenable. In many instances circles are found within the tumulus, whilst, as at Kilmartin (see p. 339), two are sometimes placed closely parallel to each other. In other cases this circle is not close to the base of the tumulus, but some little space apart from it, and therefore could not be intended as a support to it. The intention had doubtless a deeper significance than this, and they were either sacred fences or possessed some symbolical meaning.

by an incomplete circle, and has a duct leading from it. The stone upon which this circle is engraved has about thirty of the pits, and four smaller stones are set round it near the base, whilst close to it is the remains of a sepulchral cist. The second series, near Ballymenach, about three miles from Kilmartin, has four stones upon which the pits are engraved, several of which have a circle round them, and a duct. One of the stones, which has upon its east face several pits, has also a large circular hole cut through it, near the base, of a similar shape to that which exists in one of the stones at Stennis, and also upon other standing-stones in Scotland, England, Ireland, and many other parts of the world. Places of interment are connected with this series of standing-stones, which will be noticed more particularly hereafter. The third series is near Kilmichael, but no pits or circles are found upon the stones which compose it.

The same locality has already produced four rocks, profusely covered with the enigmatical circular markings; and it is probable that many others exist, now covered with turf. As it is not the object of this paper to do more than give a record of the examination of some of the sepulchral remains of the district, I will not enter further into the question of these marked rocks, which, I am glad to say, is at present engaging the attention of Professor Simpson.¹ A vitrified fort at Duntroon, though a good deal destroyed, has still sufficient remains left to show its peculiar character; and the neighbourhood affords some specimens of small fortified places, half camp, half burgh.

The places of interment, in the shape of cairns, circles of stones or of earth, and cists, placed below the surface of the ground, without any mound over them, are very numerous. Most of the cairns have been

¹ An account of all the circular-marked stones and rocks in Northumberland, with very accurate engravings, on a small scale, has just been published by Mr George Tate, F.G.S., in the Transactions of the Berwickshire Club; it is also issued in a separate form. Most careful and beautiful lithographed plates of the Northumberland circular markings, with a selection from those found in other parts of the United Kingdom, drawn full-size, were in preparation by the Rev. J. C. Bruce, LL.D., the learned author of the "Roman Wall," under the auspices of the late Duke of Northumberland. May we hope that the liberal patronage of his predecessor will be extended by the present Duke to so magnificent and valuable a work?

wholly, or in part, destroyed, many of them about forty years ago, when very considerable agricultural improvements took place; but many still remain, a few of which I examined during the autumn of 1864; and of these I propose to give a detailed account in this paper.

The first which I examined is situated upon the glebe land of Kilmartin, about one hundred yards west of the church, on the haugh, by a tributary of the River Add. It was opened to the centre on October 3d and following days, a partial opening having been made July 12th. It is made entirely of stones, the greater part of which are such rolled stones as are found upon the land, whilst every here and there were slabs of chlorite schist, which had apparently been taken from a neighbouring rock. The cairn is 110 feet in diameter, and $13\frac{1}{2}$ feet high. The examination was commenced on the south-west side, when, about 8 feet from the outside, some stones were found standing upright and apart. This proved to be a portion of one of a double circle of stones which was enclosed within the cairn. The inner of these parallel circles was 27 feet in diameter, the outer one being 37 feet, the two thus standing about 5 feet apart, and the outer circle was about 16 feet from the centre of the cairn. The stones which composed these circles were about 3 feet high and 2 feet wide, and stood from 3 feet to 5 feet apart, except for a space towards the centre of the cairn, where, in both circles, four stones were found placed close together;¹ whilst another portion, a few feet distant from these four stones, had the space between two upright stones filled in by a wall of smaller stones placed flat. In the centre, within the circles, was a cist made of four slabs of schist set on edge, with a cover of the same stone. The cist, which lay N.E. by S.W., was 3 feet 5 inches long, 2 feet 4 inches wide, and 21 inches deep. It was

¹ This is not an unusual feature in circles which enclose burials; in fact it is, in one shape or other, an almost universal one. The object seems to be to make the circle incomplete. In cases where the circle is made of stones standing apart, and whether it surrounds a tumulus or burials without any mound, or is enclosed within a tumulus, it has usually one or more spaces between two of the stones filled up, either by one stone or more. Where the circle is made of stones placed close together, or is formed of earth, then one or more openings occurs in it. Is this the same idea which is represented by the incomplete circles on the marked rocks, and by the penannular rings, which presents so marked a feature in the gold remains of the period?

half filled with river gravel, and contained an urn covered by the gravel, and a necklace of jet beads placed above the urn; all trace of the body, which had, there is no doubt, been an unburnt one, had disappeared.¹ The urn is $6\frac{1}{4}$ inches in diameter at the mouth, 9 inches at the middle, and $2\frac{1}{4}$ inches at the bottom; and is 5 inches high, of a globular form, with a round bottom, and four pierced ears, apparently for suspension. It is completely covered with ornamentation, except on the bottom, and is a very beautiful specimen of this class of urn. The ornament upon this, as upon all the globular-shaped urns mentioned in this paper, is of the same character as that on the urn from the centre of this cairn, fig. 3, Plate XX.

The beads are twenty-eight in number, of which two are oblong, $1\frac{1}{2}$ inch long and $\frac{1}{2}$ inch wide, with six holes drilled through them lengthwise; three cylindrical; the rest being thin and rounded plates of various sizes, some of them not above $\frac{1}{8}$ inch in diameter.

On reaching the centre of the cairn, the primary interment was found in a cist, formed by a hollow sunk in the surface of the ground, and lined with rounded boulders, and having a large slab of schist, 9 feet long by 4 feet 7 inches wide, for its cover. The cist, which lay exactly N.E. by S.W., was 7 feet 6 inches long, 3 feet wide, and 3 feet deep, and was filled to within about a foot of the cover with gravel. At the south-west end was a flat stone laid across the cist about a foot from the bottom, and upon this was a quantity of black unctuous matter and charcoal. About a foot from this stone, on the south-east side, and nine inches higher than it, was an urn, much broken and in part decayed, placed amongst the gravel. At the north-east end of the cist was a flat stone, similar to that at the opposite end. Upon it was a small, and below it a large quantity of dark unctuous matter. No trace of bone was found in

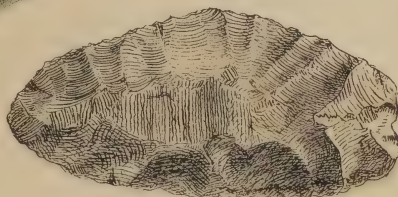
¹ When no remains of the bones are found, I feel satisfied that the interment has been by inhumation; and the very fact of the bones being absent would lead one to infer this, without taking into consideration the type of the urn, if such was present, which, however, would itself, as in this case, almost settle the question. Where the body has been burnt, the remains of the bones are always found, for burnt bones seem indestructible; at least in above one hundred cases which I have examined, I have invariably seen the bones in precisely the same condition as they were when they were deposited.

1



$\frac{1}{3}$

4



full size.

2



$\frac{1}{3}$

3



$\frac{1}{5}$

the cist; the body, or bodies—for it is probable, from the separate masses of unctuous matter, that more than one was interred—had gone entirely to decay, leaving no further trace than the dark substance which was found upon and under the flat stones. The urn is one of a type similar to many of the Irish urns, and is very characteristic of those which have been found with unburnt bodies, and sometimes with bronze daggers, in this part of Scotland. It is well made by the hand, of fine clay, and fairly baked, and is of a pale reddish-brown colour. It is 5 inches high, 7 inches wide at the mouth, and $7\frac{1}{2}$ inches at the rib just below the mouth, and 3 inches at the bottom. It is very elaborately and tastefully ornamented over the whole surface in series of horizontal and diagonal lines, with a reticulated and scalloped pattern as well, the lines being apparently formed by the impression of a narrow piece of bone or hardwood divided into squares by the raised ribs, fig. 3, Plate XX.

A considerable portion of the cairn on the north and east sides was left untouched, and, judging from other cases, it is very probable that one or more cists still remain undiscovered.

October 7th, 8th, and 10th was spent in examining a large and very remarkable cairn at Largie farm, about 300 yards N.E. of one of the series of standing-stones. It is upon the property of John Malcolm, Esq. of Poltalloch, by whose permission, and most liberal assistance in providing labourers, the examination at this and all the other cairns was made. This cairn has originally been a very large one, having a diameter of 134 feet, but the greatest part had been removed many years ago, when the stones had been taken for making walls and drains. During this operation three cists were laid bare. The first, which is 41 feet from the centre, and on the south side of the cairn, is made of four slabs of schist, with a cover, and is 3 feet 8 inches long, 2 feet 8 inches wide, and 3 feet deep—the cover being 7 feet 4 inches long, by 3 feet 6 inches broad. Whatever it contained had been removed when the cist was laid bare, and it is now empty. The second one, on the north side, is 24 feet from the centre of the cairn, and consists of four slabs of schist, with a cover, and is 5 feet 4 inches long, 3 feet 1 inch wide, and 4 feet deep. When opened in the summer of 1864, it contained an urn, much decayed, but no remains of the body, which had, no doubt, been an unburnt one. The urn is of globular form, $3\frac{3}{4}$ inches high, $4\frac{1}{2}$ inches

wide at the mouth, and $5\frac{1}{2}$ inches at the middle. It is highly ornamented over the whole surface, except on the bottom.

The central cist, of very large proportions and most interesting structure, had been rifled in part when the removal of the cairn had laid it bare; so much, however, of its contents had been left undisturbed as to make it one of the most instructive places of sepulture I have ever seen. The cist is a long chamber, lying nearly due north and south. It has a length of above 19 feet, a breadth of about $3\frac{3}{4}$ feet, and is about $9\frac{1}{2}$ feet in height, the sides being made of very large slabs of chlorite schist, with portions of walling of smaller stones. It is covered with long slabs of the same stone. The south end is filled up by one slab of schist; whilst the north, which has been the entrance, is open, with two large upright stones placed transversely to the walls of the chamber, and forming a rude kind of portal.¹ It is divided into four compartments by three flat slabs placed across the chamber, each being 2 feet 7 inches high, and there was at the extreme south end an oblong stone resting upon two upright stones, one at each end, which crossed the chamber 2 feet 7 inches from the bottom. At a distance of 11 feet 6 inches from the north end, and 6 feet above the bottom, a long slab, 3 feet broad, crossed the chamber. I regard all these cross slabs as a provision made to prevent the collapsing of the sides when the large mass of stones, which formed the cairn, pressed against them. The position in which they are placed, relative to the side stones, and the apparent absence of any other purpose in the supported slab at the south end, and in that which crosses the chamber, 6 feet above the ground, seem to warrant this conclusion. At the same time, these transverse stones practically divide the chamber into four compartments, and in my description of the contents I will treat it in this way. To commence, then, at the south end. This compartment is 6 feet 8 inches long, and 3 feet 9 inches wide, having at the south the crossing stone, supported upon two pillars, mentioned above. This compartment, like all the rest, was filled to a certain extent with a considerable quantity of stones and rubbish, which had fallen or been thrown in through holes in the roof since

¹ There are five large slabs, besides walling, upon the east side; four, besides walling, upon the west side; one at the south end; and the two transverse ones at the entrance. The roof is formed by six slabs.

the mass of the cairn had been removed. On clearing this out we found a small cist placed in the south-east corner. This, which was $2\frac{1}{2}$ feet long and 2 feet wide, was made of four stones, resting upon another flat one, and had once possessed a cover, which had been taken off, and which was lying by the side of the cist. We found nothing in it, the persons who first rifled the chamber having lifted the cover and thrown out the contents; but I think we may refer some unburnt bones and fragments of pottery, which were afterwards met with, to the burial in this small cist. On removing it we found beneath a layer of dark earthy matter, thickly interspersed with burnt bones; this layer spread throughout nearly the whole compartment. Just north of the small cist, and on a level with its bottom stone, was another flat slab, also covering burnt bones amongst dark mould. Down the centre of the compartment, running from south to north, was a pavement of small pebbles, very carefully laid down, about 9 inches wide, having at its south end one flat stone laid on the same level, and at the north end three smaller stones, also laid flat, thus forming a termination to each end of the pavement. Below this pavement was the layer of dark earthy matter already mentioned, and a few burnt bones, these becoming more thickly spread in the space between the pavement and the sides of the chamber; this dark layer was found to rest upon a second pavement of pebbles. Amongst the dark matter and burnt bones were great numbers of broken quartz pebbles,¹ one cow's tooth,² several fragments of flint, amongst which were two knives or scrapers,³ a portion of a knife, three

¹ The number of quartz pebbles purposely broken was very great in this cist. The same has occurred elsewhere. They must have been placed there with some intention, and probably possessed a symbolic meaning. In other districts flint chippings are the usual accompaniments of interments, and it is possible that the flints and quartz pebbles had the same significance.

² Teeth of cows or oxen have been frequently found with burials, not apparently the remains of feasts, but placed, like flints, &c., with some symbolic meaning.

³ The knife or scraper is the commonest implement which is found. It occurs by thousands in the North and East Riding of Yorkshire upon the surface of the ground, and is also the most frequent accompaniment of burials after cremation, having been sometimes burnt with the body, and sometimes placed amongst the burnt bones after they were collected. It is of various shapes, the most common

perfect and two broken barbed arrow-heads, very beautifully and delicately chipped, all being unburnt. On the west side of the small cist and lying upon the dark layer, was a single fragment of an urn, of which we found several other fragments in another compartment. To the north of the cist, and lying close to the side of the chamber, was an urn sadly broken and decayed, but of a very novel and peculiar type, both as regards its material and ornamentation, fig. 1, Plate XX. It has a round bottom, from the centre of which run shallow and narrow flutings reaching to the lip, which is broad and thick, and turns over with a convex surface, that also being fluted like the side. The ware is dark coloured, almost black, like some of the Anglo-Saxon pottery, well worked and thin, with no broken stone amongst the clay, but apparently with a good deal of sand worked into it. It is $6\frac{1}{4}$ inches high, $12\frac{3}{8}$ inches wide at the mouth, the rim being $1\frac{1}{4}$ inch wide. From the way in which this urn was deposited amongst the undisturbed layer of dark earthy matter and burnt bones, I cannot hesitate to attribute it to the primary interment, novel as its type is, and though it partakes much more of a late than of an early character. The introduction of the secondary interment and of the small cist had probably caused it to be broken, but it had certainly been deposited as a whole vessel at the time when the layer of dark matter was placed in the chamber.

The next compartment is 4 feet long and 3 feet 9 inches wide. At the bottom of the rubbish which had fallen through the roof, and above the undisturbed deposit at the bottom, were numerous fragments of three urns, of one of which a portion was found in the last compartment. Of one of these sufficient is left to show the shape and style of ornamentation; of the other two there is just enough to show that they are of the same type, which is of the so-called "drinking cup" pattern. They are very well made by hand, of fine clay, well baked, and of a reddish-brown colour, and the ornament delicately and tastefully applied. This

being the round one, generally called a "thumb flint," and it varies in size from less than $\frac{1}{2}$ an inch to above 3 inches in diameter. Another common form is an oval one, sometimes rather pointed, which is the shape of those found at Largie farm; a rarer form approaches in shape to an unbarbed arrow-head. Its use is evidently to scrape hides and bone. Implements of flint, identical in form, are used for the same purpose by the Esquimaux at the present day.

consists of series of horizontal impressed lines running round the urn, alternating with similarly encircling impressions of saltires, the first made by a narrow piece of bone divided into squares by sunk lines, the other by the application of a sharp oval-ended piece of bone or wood $\frac{3}{8}$ th inch long, impressed saltire-wise; below this is a plain band, and then impressed lines similar to those first mentioned, but having between them, in place of saltires, horizontal impressions made by the same instrument which made the saltires; below this a plain band, and then the first series repeated. The inside of the lip has an encircling row of the saltires between four lines of impressed thong, two on each side. These urns are of the type¹ which is always found with unburnt bodies, and I have no doubt that they had been originally deposited with such—one probably in the small cist, the other in different parts of the chamber, and associated with the secondary interments of which we found some remains nearer the entrance.

On reaching the bottom of this compartment there was found the same deposit of dark earthy matter, with burnt bones as in the last, and also, like it, resting upon a rough pavement of pebbles.

In the next compartment, which is 4 feet 6 inches long, we met with, amongst the rubbish which partially filled it, several bones of unburnt bodies, together with some animal bones of oxen, and a few fragments of a rudely-made, dark-coloured urn, without any pattern upon it. All these remains had evidently been removed from their original place of deposit, and thrown in amongst the rubbish. There was no layer of earthy matter, burnt bones, chippings of flint or quartz, or pebble pavement, at the bottom of this compartment, nor the slightest trace of any interment.

The outer compartment, which is 4 feet long and 3 feet 8 inches wide, had a wall of small flat stones built up on each side to a height of about 2 feet 7 inches, having a space 2 feet 2 inches wide in the centre. Amongst the rubbish which filled this space we came upon a considerable quantity of ox bones, and several unburnt human bones, amongst them

¹ An urn, almost identical in size, shape, and ornamentation with those in the Largie farm chamber, was found with an unburnt body in a barrow on Roundway Hill, near Devizes, Wiltshire. There were also found, accompanying the body, a barbed flint arrow-head and a bronze dagger. The urn is figured in "*Crania Britannica*," plate xlii.

portions of three lower jaws. All these had certainly been displaced from their original position and been redeposited here, and were no doubt other portions of the secondary interments with which the urns of the "drinking cup" type had been deposited. Lower down were two pieces of flint, but no trace of a burial.

The features connected with this sepulchral chamber supply us with some valuable facts relative to the different modes of interment which were in use, it is most probable, at different periods. We learn from it that, in this part of Scotland, at all events, the earliest interments in the large megalithic chambers are of burnt bodies. The original and undisturbed layer, with burnt bones in it, at the bottom of the two most southern compartments—the only ones which contained any primary burials—proves this most distinctly. The examination of the similarly constructed chamber in a cairn at Kilchoan, by my friend the Rev. R. J. Mapleton, of which a detailed account is appended, has produced very strong corroborative evidence of this. The remains of unburnt bodies which were found in this chamber in the cairn at Largie farm, and also in that at Kilchoan, belong most unquestionably to a later, it may be to a considerably later, period than the deposits of burnt bones in the same chambers. These unburnt bodies belong most probably to the same period as that during which the corpse was frequently placed in a cist sunk below the surface of the ground, and where apparently no mound¹ was ever raised over it. With these interments were buried beautifully made urns, and in some cases bronze daggers, and of such cists numerous examples have been found in the district. This priority of cremation to burial by inhumation quite agrees with my experience in districts farther south; and though I do not doubt that there was a still earlier time than this of burning, during which the body was interred unburnt, I am

¹ I have known of so many instances where cists containing unburnt bodies, sunk below the surface, and having no perceptible mound over them, have been found in situations where the plough cannot have destroyed all trace of a mound, that I am persuaded a great number, perhaps the greatest number, of cist burials in the later period of bronze, were without barrows. Their number must be great, for very few out of those which no doubt exist, owing to there being no outward indication, are likely to have been discovered; and yet great numbers have turned up, principally through deep ploughing.

inclined to think that many of the instances, upon which Dr Wilson bases his theory of the megalithic chambers having been made by a people who buried their dead unburnt, would have turned out, if the examinations had been made with care, to have been, like that in question at Largie farm, the places of burial after cremation, and used in later times for the reception of unburnt bodies. The contents of this chamber enable us to trace either identity of race or the influence of intercourse between widely separated tribes, for the Largie farm cairn and a Wiltshire barrow have produced urns, the one almost a facsimile of the other; and though we may imagine that natural cleavage, and a want common to all races in the same stage of civilisation, might produce similar implements in flint, we cannot conceive such to hold good in productions showing design and artistic feeling, such as these urns exhibit. There must have been some common teaching other than that which nature bestows to give rise to articles manufactured like these.

October 14th was spent in examining a cist in a large cairn at Duncraig, the greater part of which had been previously opened by Mr Mapleton. I include both the examinations in one account. The cairn, which consists entirely of stones, is about 100 feet in diameter; what the height has been it is impossible to say, as the greater part had been removed long ago. In the centre was a cist, made of four slabs of schist, with a cover, 4 feet 6 inches long, 2 feet 6 inches wide, and 2 feet 6 inches deep, lying E.N.E. and W.S.W. Upon the cover stone was an unburnt body, gone almost entirely to decay, lying east and west. The cist was nearly filled with a mixture of clay, sand, and gravel, amongst which were calcined bones and charcoal, an urn, and a few flint chippings. Below the mixture was a pavement of flagstones, and under that, amongst clay, an unburnt body, doubled up, the head being to the N.E. The urn is of a globular form, 4 inches high, $4\frac{3}{4}$ inches wide at the mouth, and $5\frac{3}{4}$ inches at the middle, and covered with ornament, except on the bottom.

About 22 feet east of this was a second cist, 1 foot 6 inches long, 1 foot 3 inches wide, and 1 foot 3 inches deep, lying N.E. by S.W., and partly filled with gravel. Upon the surface of the gravel was an urn, and amongst the gravel burnt bones, and a few flint chippings. The urn, of a globular form, is $3\frac{3}{4}$ inches high, $4\frac{3}{4}$ inches wide at the mouth,

and $5\frac{3}{4}$ inches at the middle, and is ornamented over the whole surface, including the bottom.

On the south side of the cairn, 27 feet from the outside, was a very large and remarkable cist. It consisted of a hollow made in the natural surface of the ground, and lined with rolled stones, which also rose above the surface. Upon these rested a large slab of chlorite schist, 14 feet long, 8 feet 4 inches broad, and 15 inches thick. The cist, which lay W.S.W. by E.N.E., was 7 feet 6 inches long, 3 feet 2 inches wide, and 3 feet 6 inches deep. On a pavement of flat stones at the west end was a deposit of dark earthy matter, which contained the remains of more than one burnt body; and under three of the flat stones, about $2\frac{1}{2}$ feet from the west end, was another deposit of burnt bones. About the middle of the cist, where the burnt bones had become less frequent, were some remains of an unburnt body much decayed, and possibly disturbed since it had been first deposited. Beyond the middle, and towards the east end, all trace of bone, either burnt or unburnt, was wanting, nor was there any signs that an interment had ever taken place at that end. No flint, quartz, or fragment of pottery was found in any part of the cist. It will be observed that in this cist, as in those at Largie farm and Kilchoan, the primary deposit had been of burnt bodies, to which had afterwards been added a burial by inhumation. It is true that in the central cist in this cairn, and which might, therefore, be regarded as the primary place of interment, the burial was by inhumation. Judging, however, from the size of the large and exterior cist, and the correspondence of its contents to those at Largie farm and Kilchoan, it is not improbable that this large cist had been the primary place of interment, and that the cairn had been added to it towards the north at a later period. Amongst the stones of which the cairn consisted were found at different spots a whetstone, a hatchet of greenstone 6 inches long and 3 inches broad at the cutting edge, a flint knife, and several fragments of pottery.

On October 15th a sepulchral circle at Ballymenach was examined. It is situated 140 yards south of one of the series of standing-stones, before mentioned—that which has one of its stones with a pierced circular hole in it, and several with pits and circles engraved upon them. The sepulchral circle consists of an earthen mound, with stones placed upon

it at intervals, having a ditch within it. It is 95 feet in diameter measuring to the outside of the mound, and 66 feet diameter within the ditch. Two opposite entrances¹ lead within the circle, on the east and west sides. A careful examination of the enclosed space disclosed two cists. One was south-east of the centre, and 29 feet from the exterior mound; it was formed of four side stones and a cover, and was 3 feet long, 1 foot 4 inches wide, and 1 foot 10 inches deep, and lay N.E. by S.W. At the bottom was some mixed sand and gravel, above which were the broken remains of an urn of the "drinking cup" type, and the remains of unburnt bodies, in the shape of the teeth of apparently three persons. The cover had been previously removed, when the urn was broken, and a considerable portion of it taken away. It is 7 inches high, $5\frac{1}{2}$ wide at the mouth, and 5 inches at the swelling part above the base, fig. 2, Plate XX. It is ornamented with three lines running round it below the lip; under these are reversed triangles, those which point upwards filled with horizontal lines, the alternate ones pointing down being plain; below these are three encircling lines, then a plain space, then three encircling lines, and below them triangular spaces similar to those above, but having the series of horizontal lines in those spaces which point down. All the lines are made by the impression of a narrow piece of wood or bone divided into squares by thin grooves.² Near the centre was a much larger cist, 6 feet long, 2 feet 9 inches wide, and 2 feet 4 inches deep, the side stones of which were 9 feet long. It lay N.E. by S.W. A portion of the cover stones had been broken off at some former time, and an entrance effected, when no doubt the cist was rifled. The bottom had a few inches of gravel upon it, and above the gravel was a very regularly formed pavement of small rounded pebbles. Nothing whatever was found in the cist.

October 16th was spent in examining what was left of a partially destroyed cairn at Rudle, of which scarcely anything remained of that above the surface of the ground. Three cists were found below the surface, all upon the south-east side,³ and of small size. One contained an

¹ See note, p. 338.

² I have an urn, almost identical in form and ornamentation, found near Rothbury, Northumberland, with an unburnt body.

³ It may be laid down as a rule, that other interments than that in the centre of

urn, rudely formed, with no remains of the body. The urn is 6 inches high, $6\frac{1}{2}$ inches wide at the mouth, and $3\frac{3}{4}$ inches at the bottom. It has a projecting rib $2\frac{1}{2}$ inches from the top, from which it gradually tapers to the bottom. The ornament is formed by vertical and horizontal lines of impressed thong.

A second, which had been opened before, contained a few portions of an unburnt body, some small fragments of a very rudely formed urn, and a "thumb flint," of the long type, fig. 4, Plate XX. The third cist, which had also been previously opened, contained nothing.

In concluding this notice of places of burial, which I either partially or wholly examined in person, I may also mention that, from time to time, several cists have been found in the same locality, over many of which no cairns seem ever to have been raised. These cists have been placed below the surface of the ground, and have generally been found to contain urns of a very superior make and style of ornamentation, in type much like that from the Kilmartin cairn, fig. 3, Plate XX.; in some instances these cists have contained a bronze dagger. The skeleton, or indeed any part of it, has very rarely been found, having gone entirely to decay, as is usually the case when a cairn of stones covers the interment. Where air and wet get such free admission as they do in cairns, the body decomposes much more rapidly than where a compact mass of earth covers it.

The examination of the burial places, described in this paper, affords some facts bearing upon the question of the relationship which existed between the people of Argyleshire and of other and neighbouring countries. As was mentioned before, the urns which occurred in the cairns and burial circles are, in shape, material, and style of ornament, very similar to those which have been found on the opposite coast of Ireland, and from this it may be inferred that the two countries were, in prehistoric times, occupied by the same race. That a constant intercourse was kept up between the two shores is evidenced by the Argyleshire implements, which are made from a chertsose flint coming from

a tumulus are upon the south and east sides. The same feeling which prompted this prevailed in Christian times, when the south side of the churchyard was always selected as the place of burial.

Ireland. The identity of the people who inhabited the west of Scotland and the north-east of Ireland, in historic times, is certain, and that can scarcely have altogether arisen from the later Scotie occupation from Ireland, which was indeed only the migration of tribes to places already occupied by others related to them. This earlier and prehistoric relationship is quite borne out by the evidence which the burial mounds afford. At the same time they show a wider intercourse and influence in art and manufacture, and probably a racial connection, which extended far beyond the limits of adjoining districts, for some of the urns are scarcely to be distinguished from those which have been found in England at places far removed from Argyleshire. One cist produced an urn identical with one from the middle of Northumberland, whilst another showed fragments of three urns, of a very marked type, almost facsimiles of one found in Wiltshire. Unfortunately nothing as to race¹ can be gathered from the remains of the bodies, of which no portions of skulls were found, save the fragments of some lower jaws.

II.

NOTICE OF A CAIRN AT KILCHOAN, ARGYLESHIRE, AND ITS CONTENTS. BY THE REV. R. J. MAPLETON, M.A. COMMUNICATED BY J. STUART, ESQ., SEC. S.A. SCOT.

About a quarter of a mile N.E. of the vitrified fort referred to in the paper of Mr Greenwell, up a small glade, are the remains of a megalithic cist, in many respects similar to the one on Largie farm—though not quite so large—which I examined December 28, 29, 30, 1864.² The

¹ Mr Mapleton found the skeleton of a female in a partially destroyed cairn at Tyness, near Kilmartin. The female skull is never so typical as the male, and has generally a tendency to dolicho-cephalism, and therefore this skull cannot be considered as of the same value as if it had been that of a male. It falls, however, as we should expect, into the type of the brachy-cephalic skulls of the round barrows of the bronze period, having a parietal breadth of very nearly $\cdot77$ to a length of $1\cdot00$.

² Kilchoan is about a quarter of a mile west of a set of rock-markings, of which

place is called "Kilchoan,"—the *cil* or burying-place of St John. The legend is that there was a burying-place there a few years ago; but I cannot find any remains of the chapel, nor can I hear of them from men who have been employed in numerous alterations.

The only sign of interment that I have been able to discover was a long loose stone grave—for I cannot call it a cist—about 100 yards west of the cist. It was just below the level of the present road, and its dimensions were 6 feet 6 inches long, 2 feet 4 inches wide, and 1 foot 6 inches deep. It was composed of two very thin slabs of schist, on one side—very loosely and carelessly put together—on the other side only one slab remained. The two end stones were in their place; the cover was gone.

The great cist has evidently at some time been covered with a cairn of the usual construction, viz., rounded stones and occasionally blocks of schist. I can trace these for 36 feet on the south side, but all have been removed on the north and east to make way for a very old road. The ground on the south side is still two or three feet higher than on the north, from the remains of the cairn.

The cist is placed E.N.E. by W.S.W., and consists of a chamber 14 feet 8 inches in length, 8 feet 3 inches in height at the highest part, and varying from 4 feet 8 inches to 2 feet 8 inches in width. It is formed by six heavy massive slabs of chlorite schist—three on each side—one of which is 7 feet long, 3 feet 2 inches deep, and about 5 inches thick; another is 6 feet long and 13 inches thick. The first pair (*i.e.*, at the east end) are not parallel, but converge towards the east; so that the western edges are 4 feet 8 inches, and the eastern only 3 feet apart. The next, or middle pair, are placed just inside the others, so that their *outer* surface just touches the *inner* surface of the others, like the slides of a telescope. The third, or western pair, are placed in the same manner as the eastern, so that the western end is narrower than the middle. These form the cist *proper*, and are sunk into the ground, so that the interments were below the surface.

all have been destroyed but one or two markings. It is also one mile south of another set—*i.e.*, a flat crown of rock—with ten or eleven markings in it. Both sets are in the same glade.

The roof was formed by large heavy slabs of chlorite schist, supported on pillars—of which four are still standing, and two of the cover slabs still rest upon them, though displaced. One (towards the east) is 8 feet long, 5 feet wide, and 1 foot 3 inches thick at one end, but only 3 or 4 inches at the other. Another, which covered the west end, is 6 feet long, 4 feet 10 inches wide, and 10 inches thick. There is another slab at the east end, which a man told me was resting on two pillars four years ago—and *I* also remember it well; it is 5 feet 9 inches long, 2 feet 6 inches in width. This I believe to have been the cover of the entrance to the cist.

There are only four of these pillars remaining, unless the stone at the west end of the building was one, but there is every appearance that others have been removed. The four that remain are placed thus—One pillar on each side of the cist, at the east end; and one pillar on each side, where the middle and west side slabs meet.

Those at the east end converge towards the east, following the direction of the side slabs. One of them is 5 feet 2 inches in height, 3 feet 9 inches wide, and about 10 or 11 inches thick. The other is 4 feet 10 inches high, and 2 feet 9 inches wide. The two project a little beyond the end of the chamber. Those in the middle are about 3 feet 4 inches high, and 2 feet wide; but to compensate for this want of height, a cross bar of stone, 6 feet 10 inches long, and 1 foot 8 inches thick, rests upon these pillars; and the cover upon the bar, and the thickest part of the cover is at this end. These pillars are placed close to the side slabs, so as to add strength as well as to support the cover. In this respect this cist differs from the Largie cist, viz., that whereas in the Largie cist the cover rests upon the walls themselves, in this cist it rests upon pillars placed outside the slabs forming the central cist.

The chamber was evidently higher at the east or entrance end than at the other; and the remarkable convergence, both of the side slabs and also of the pillars, at the east end, seems intended for an entrance.

The chamber is divided into three compartments by two thick strong slabs placed across the cist, just where the three pairs of side slabs join.

They are not so high as the side slabs by several inches, and were evidently intended for *strength*, as well as for divisions. They are about

2 feet 2 inches deep. Several blocks and small slabs of stone are lying about, and some in the cist, which may have been used to fill up the spaces between the pillars. At the west end of this chamber, and 8 feet from it, is another cist, of the ordinary construction—of four slabs and a cover with a cross bar or tie, at the east end, near the top. The cist is four feet by 2 feet 8 inches, and 2 feet deep. The cover is 7 feet 4 inches by 4 feet 2 inches, and about 7 inches thick.

The first compartment (*i.e.*, that at the east end, nearest to the entrance) is 3 feet 4 inches in length. Its width is 3 feet at the east end, and 4 feet 8 inches at the west end; depth, 3 feet.

On removing the stones and rubbish which had filled it up, I found a kind of white concrete, full of charcoal, extending over the whole surface. On this concrete were deposits of burnt bone, but chiefly at the sides and in the corners. One very fine well-made flint implement of a long form was found about the centre. Under the concrete were about 3 or 4 inches of imported yellow sand. In this we found two manufactured oblong flint implements, not unlike an elongated gun flint; half of a tapering knife or scraper, apparently of a coarse carnelian, round at the end; several unfinished implements, and chips of flint. These were found *under* the concrete and deposit of bone. The concrete appeared as if it had never been disturbed.

The second compartment is 5 feet 2 inches long by 3 feet 5 inches wide, and 3 feet 5 inches deep.

A cross bar of stone had formerly been placed near the top at the west end; and it was found lying at the bottom with burnt bones *upon* it, *behind* it, and *under* it.

The bone was coarsely burnt. Rather large flat stones were placed in various parts of this compartment, forming recesses, in which were burnt bone. There have evidently been several deposits. Among the sand at the bottom was a round stone, even, but not polished, about 3 inches in diameter.

A flake of flint, leaf-shaped, but not otherwise manufactured, was found adhering to the wall in one corner. Half of a rough knife and two or three chips and small flakes of flint were found in the sand.

The third compartment is composed of two side slabs, one of which is 7 feet in extreme length, and 3 feet deep; an end slab, 6 feet high,

13 inches thick; and the dividing slab at the east end. This compartment is 4 feet 8 inches long, 2 feet 8 inches wide, and 2 feet 8 inches deep.

Among the rubbish and soil thrown out was a portion of a very fine urn,¹ thick and very well baked, and two pieces of old *unburnt* bone. A pavement of stones, not very carefully made, covered the surface under the rubbish, and under this was a great quantity of imperfectly burnt bone, chiefly at the sides and in the corners. Two small cow's teeth unburnt were found in the sand, and seven well-finished flint implements of various shapes—long, oval, triangular, &c.—with several flakes and chips of flint. On digging through the sand to the rock beneath it, we found charcoal, almost on the rock itself. Some pieces were very large (*i.e.* in diameter as large as a shilling), and in one spot especially the sand was *run*, *hardened*, and *reddened* by fire. The whole surface of sand gave me the impression of being baked, even, in compartments one and two; but there could be no possible mistake with respect to number three, as the sand was *reddened* by fire, and in some places *run*.

I wish to draw attention to this, as it seems to me to prove that the primary interment in this cist was by "cremation;" and as we dug to the rock in all three compartments, we could not find the least appearance of unctuous matter or discoloured soil. The exact position of the unburnt bone I cannot give, only it was above the pavement.

The other cist at the end did not produce a fragment of bone or flint, and only one or two pieces of charcoal among the sand. The place had long been a play-place for children, and was filled with shells and broken crockery.

I must add, in reference to a note of Mr Greenwell's, that broken quartz pebbles were found in all the three compartments—some even among the sand under the concrete and pavement, where they could hardly have come by accident.

¹ The fragment consists of a portion from the rim to the middle. Inner lip, *plain*; outer lip, two rows of large rough impressions; a raised rib, and large deep flutings, vertical; another raised rib. The substance is very well baked, *red*, fine material, 1 inch thick where broken off in the middle.

III.

NOTICE OF HUMAN REMAINS FOUND IN DIGGING AT THE CITADEL, NORTH LEITH. BY D. H. ROBERTSON, Esq., M.D., F.S.A. Scot.

The citadel of North Leith was erected by order of Oliver Cromwell in 1653. It was garrisoned by the Protector's troops till the Restoration, when it was given in grant to the Earl of Lauderdale. General Monk at one period resided there, as appears by the Trinity House records. It is represented in Greenville Collins's Chart, originally published in his "Great Britain's Coasting Pilot," 1693, as a quadrangular fortification, with large angular bastions and ditch. The north-eastern bastion has been exposed in the recent drainage works. It is composed of solid and massive mason-work, rough towards the ditch and sea, but well chiselled in the inner front. The ditch on the other side was found at the depth of 10 feet to be soft and almost muddy. The soil was of a very black colour, and on what might have been its slope the remains of about forty adult male skeletons were excavated. The skeletons I apprehend to have been those of the troops who died while garrisoned there, as we have no record of any assault having been made on the fort. Opposite the north entrance to the Mariners' Church a number of coins were found near the surface. These were chiefly foreign copper ones of the smaller German States, and several halfpennies of George II.

One portion of the citadel still remains. It consists of a lengthened arched doorway of massive masonry, with a cutting which might possibly have been for a portcullis.

In the writer's boyhood days, the area of the citadel formed the site for the travelling circus and strolling booths, where Douglas, and the Warlock of the Glen, were performed to the entire satisfaction of the beholders; but the terminus of the Edinburgh, Leith, and Granton Railway, and the Mariners' Church, have occupied the space, and left these neither a local habitation nor a name.

IV.

NOTICE OF THREE SMALL BRONZE BLADES, OR INSTRUMENTS BELIEVED TO BE RAZORS, AND A BRONZE SOCKETED CELT IN THE MUSEUM OF THE SOCIETY; WITH REMARKS ON OTHER SMALL BRONZE BLADES. By JOHN ALEXANDER SMITH, M.D., SEC. S.A. SCOT.

Some time ago my attention was called to this peculiar class of minor bronze antiquities, and I read a paper on the subject in April 1863, which was published in the "Proceedings of the Society," vol. v., describing a singularly shaped and apparently unique bronze implement (Fig. 1) found at Kinleith, near Currie, in the immediate vicinity of Edinburgh, which I had then the pleasure of presenting to the Museum of the Society. (For the sake of reference, the figures of the bronze implements described in that communication are repeated here):—

This double bladed bronze relic, found at Kinleith, I considered to be in all probability an ancient depilatory instrument or razor, and analogous in character to the double edged implements of bronze, of nearly similar length of blade, found in Ireland; three specimens of which are preserved in the valuable Museum of the Royal Irish Academy, and another and larger specimen in the Museum of Trinity College, Dublin. (The accompanying woodcut (Fig. 2) gives a representation of the largest of these implements, copied from the catalogue of the Royal Irish Academy, 1861.) No bronzes of a kind similar to these Irish implements or razors were known to have been found in Great Britain until a very recent period, when one was discovered in the island of Anglesea, along with bronze tweezers, beads of amber, &c., and is thus referred to by Mr Albert Way, in a letter with which he was kind enough to favour me:—

"Since I had the pleasure of corresponding with you regarding the relic of bronze from Kinleith, my brother-in-law, Mr Stanley, who lives near Holyhead, and has always a keen eye on any antiquities there or in Anglesea, has sent me several objects found in that island, a string of large amber beads, a pair of bronze tweezers, numerous bronze rings, such as abound in Ireland; some other bronze relics of

very Hibernian character, and a bronze 'razor.' I believe no specimen has been found out of Ireland; but the ancient ornaments, &c., found in Anglesea, and on the shores of those parts of North Wales, bear

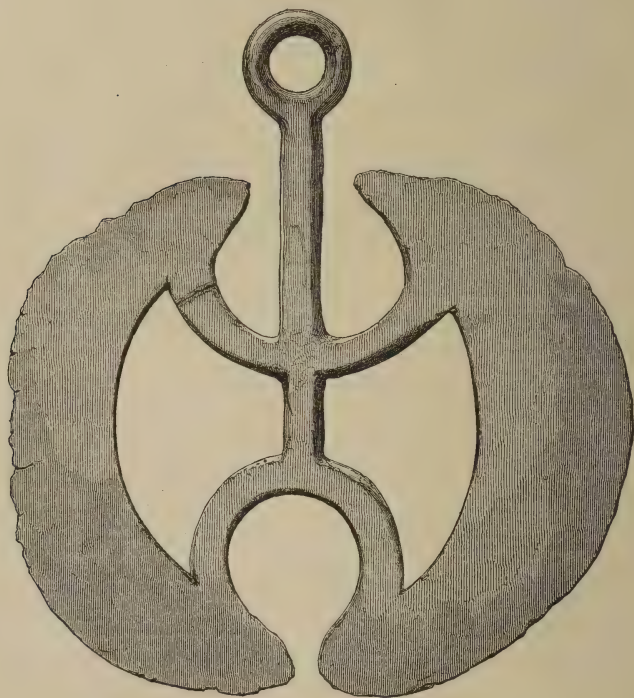


Fig. 1.—Bronze Implement found at Kinleith, Mid-Lothian.
(Scale, size of original.)

a strong resemblance to Irish relics of their class respectively, and confirm the supposition that the marauding Irish were occupants of these districts."

Mr Way sends me a sketch of the bronze relic (an enlarged copy of

which I exhibit). It corresponds in general character and size to the bronzes found in Ireland, the blades, however, are more rounded above, the divided points being less separated from one another, and the posterior points less distinctly barbed than in the Irish specimen (Fig. 2). It has the same round perforation below the bifid extremity, but has this peculiarity, however, and difference from the Irish as well as the other specimens to be described, that the fissure between the points of the blades opens into the rounded hole itself. From the thicker tang or handle two parallel longitudinal grooves or lines run upwards in the middle of the blade.

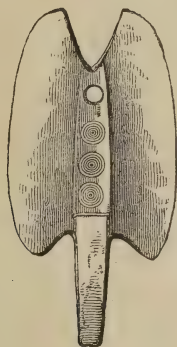


Fig. 2.—Bronze Razor (as supposed), from Museum of Royal Irish Academy, Dublin. (Scale, one-half of size.)

Since my former paper was read I have noticed among the collection of smaller bronzes in our Museum three relics closely allied, or indeed almost identical in character, to the bronzes found in Ireland; and the special object of this communication is to bring these under the notice of the Society, as they appear somehow to have been overlooked in the published catalogues of the Museum. Indeed, I have not been able as yet to find any notice of them in the Minute-books, or among the MSS. papers, and Mr M'Culloch, whose services have been brought under requisition, states that after a

careful search, he has been quite unable to find any account of them among the papers of the Society. Luckily, in the course of the search, a water-colour sketch was found, which gives full-sized figures of these three bronzes, so exactly delineated, that it would appear as if the bronzes themselves had been simply laid on the card, and their outlines drawn around them. This sketch associates with them a bronze socketed celt, showing on one side of the neck the remains of a loop, which has been broken off; and as the length of the sides of the celt are slightly unequal, an obliquity is thus given to its face. The colour of the metal of these different implements also corresponds closely, as shown in the drawing. It was, therefore, an easy matter, from these various peculiarities, to select from the collection in the Museum of the Society this identical celt, and on comparing it with the full-sized drawing, it was found exactly to correspond; the celt, like the others, having been outlined from the original itself. The yellowish green colour of the tarnish or ærugo of the celt, and the three small bronzes was also exactly similar, the character of the yellowish bronze being apparently the same in all. These different objects are numbered in the original drawing in such a way as apparently to show a relation between the celt and the other bronzes; the largest bronze blade being marked as No. 1, the celt No. 2, and the two smaller bronze blades Nos. 3 and 4. They would appear, therefore, to have some connection with one another, and were probably all found together. (The annexed drawings of these bronze relics, to a scale of half the size of the original, will show their general character, Fig. 3, 1-4.)

The bronze blades are apparently somewhat ruder in character than those found in Ireland, at least than the example figured before (Fig. 2), but in other respects they closely correspond, as well as to the one described by Mr Way; and although they are much chipped and injured, it is easy to see that they have had a sharp edge on each side, the blades being double. The stem or handle is the thickest part, being about a tenth of an inch in thickness, and the centre of the bronze plate is also generally thicker than the rest of the blade, the metal being thinned gradually away towards the edges all round; and, with the exception of the groove on No. 1, none of them show any traces of ornament.

The largest specimen, No. 1, measures $3\frac{1}{4}$ inches in total length, the

blade being 2 inches in length, and the handle $1\frac{1}{4}$ inch; and the blades are $2\frac{1}{2}$ inches in greatest breadth; it seems to be more rounded in its general outline than the others, in this respect resembling the one found in Anglesea, and described by Mr Way. A simple, shallow groove, probably for ornament, runs up the centre of the plate from the handle towards the forked extremity, in the line of the more distinctly defined



Fig. 3.—Bronze Implements or Razors, and Socketed Celt, from the Museum of the Society. (Scale, half the size of the original.)

middle rib or ornamented projection of the Irish example (figured before, Fig. 2). The other and smaller examples show less of this central projection, and are devoid of ornamental markings of any kind. The next in size, No. 3, measures $3\frac{1}{4}$ inches in total length, the blades rather more than $1\frac{3}{4}$ inches long, and $1\frac{1}{2}$ inch in greatest breadth; the handle has been broken across at its junction to the blade. The third speci-

men, No. 4, is $2\frac{1}{2}$ inches in total length, the blades being $1\frac{3}{4}$ inch long and $1\frac{3}{4}$ inch in greatest breadth. The blades of all of them are much chipped and broken, still their correspondence in character with the Irish examples is distinct enough; they project but slightly backwards, however, on each side of the handle, and terminate above in a forked or



Fig. 4.—Bronze Implement (Fig. 3, No. 1) from Museum, showing how it may have been held for use. (Scale, one-half of size.)

notched extremity with blunt edges, the points of the double blades apparently running slightly outwards on each side. Two of these bronzes are pierced, as in the Irish specimens, with a small round hole near the forked extremity farthest from the handle. In No. 3, however, this perforation does not exist.

I have already stated my opinion that this small round opening may have been simply for enabling the bronze to be suspended, for convenience

or ornament, as well as for the purpose of preserving the sharp edges of the blades from being blunted. It appears to me, however, it might in addition, be possibly of another use,—assisting in the firmer holding of the blade, by having a small twig, the shaft of a feather, or a pin passed through it, on which the forefinger could rest, while the tang of the bronze was held between the thumb and the second finger, and in this way give a facility for using the blade as a depilatory instrument, in adapting its edges to any part of the face (Fig. 4). This supposed additional use of the round opening, would do away with the difficulty of believing it was intended merely for suspension, which meets us in the case of the bronze described by Mr Way, in which the cut or fissure between the points has been made to run into this round opening itself. It may also be noticed, that in the bronze (Fig. 3, No. 4, figured before), in which there is no round opening, you have the points of the blades more apart or separated from one another, so that the point of the forefinger could be easily hooked on the blunt edges between them, and thus render the presence of any opening unnecessary; while in the other cases, as also in Mr Way's specimen, the points of the blades are so close together that no finger-point could be introduced between them, and in these the round opening is present, to allow of the introduction, it may be, of the twig or pin on which the finger could rest, when the razor was required for use. None of the tangs or handles of these relics show any appearance of having been fixed to any kind of additional handle; they have apparently been used by being simply held between the thumb and fingers. Such an arrangement for the use of these bronzes as that now suggested, would also make them correspond somewhat to that of the Kinleith bronze (Fig. 5), and to those found in the lake-houses of Switzerland, where the forefinger may have been simply hooked over the upper part of the blades.

The celt (Fig. 3, No. 2) measures rather more than $3\frac{1}{4}$ inches in greatest length, and about $2\frac{1}{4}$ inches across the face, which is a little oblique, from one side of the celt being slightly shorter than the other. It is quadrilateral in shape towards the socket, the socketed part being oval; its neck is surrounded by a slight projection or collar measuring rather more than $\frac{3}{4}$ of an inch in breadth; besides this, it is destitute of any ornament; the sides or edges are slightly bevelled, and it shows on

one side the remains of the loop which has been broken off a little below the neck. This somewhat quadrilateral or square-necked style of socketed celt is apparently a common variety among those found in Scotland.

These three bronze implements are of considerable interest, as well from their comparative rarity as from their being apparently found along with this rather rude form of socketed celt, a testimony in all pro-

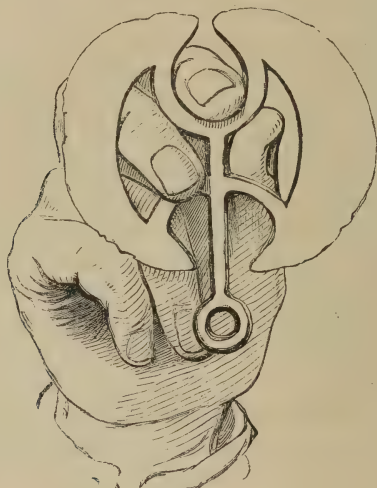


Fig. 5.—Bronze Implement from Kinleith, showing how it may have been held for use. (Scale, one-half of size.)

bability to their great antiquity; and still more, from the possibility of their having been found in Scotland, and so far as I am aware, no other specimens of an exactly corresponding kind have been found here. Indeed, it seems to me not unlikely that the local interest attached to them, from their probably having been found in the neighbourhood of Edinburgh, had caused the water-colour sketch to be made, and presented along with the articles themselves, to the Museum of the Society, at a time when these relics, apparently so rude and uninteresting, with no intrinsic beauty or value to recommend them to the virtuoso or the mere collector, were probably considered of very little interest by our

antiquaries, for it is difficult to conceive how they could otherwise have been passed over altogether in silence; no record whatever existing in the Minute-books or MSS. of the Society, as far as I have been able to discover, to show they had ever been exhibited or presented to the Museum; indeed, it is only from the possession of the water-colour sketch, and the bronzes themselves, among the less prized antiquities in the collection, that we learn anything of their relation to one another, or even of their existence. Had these relics, therefore, not been found in Scotland, it is difficult to fancy that any sketch would have been made of them, when presented to our Museum; or indeed that any trouble of this kind would have been taken, with such apparently little valued relics of the past.

Mr Way believes the curious double-bladed bronze implement found at Kinleith, to be distinct in character from the double-edged blades or razors found in Ireland, and also, I should fancy, from those now described. He considers, however, that the Kinleith bronze may be analogous to those found in the lake-houses of Switzerland. It was, therefore, with considerable interest, as bearing on this question, that I observed among the varieties of bronze implements figured by Dr Keller in his report on Pfahlbauten (published in the "Mittheilungen der Antiquarischen Gesellschaft, in Zürich," Band xiv. Heft 6. Pfahlbauten—Fünfter Bericht (Taf. 11, 25, 26), 1863), one that seemed to me to bear a relation both to the straight double-edged bronze blades found in Ireland, and to the more crescentic-shaped Swiss bronzes, or "half-moon images," as they have been styled, discovered in the lake-houses, as well as to the Kinleith bronze. In this specimen, which was found at the pile-dwelling of Castione, in the province of Parma, the double blades are not crescentic in form, but nearly straight, or only very slightly rounded in outline: they terminate in a forked extremity above, and project outwards below, on each side of the handle, like these just described (Fig. 3), and those found in Ireland; the central space between the blades, however, is latticed with open work, continued upwards from the open worked handle below, which apparently terminates, like that of the crescentic-shaped blades, in a ring. It also corresponds nearly in size to both of these kinds of bronze blades. Of the class of double-bladed bronzes we have, therefore, these of a ruder

kind, found principally in Ireland, but also in Wales, and probably also in Scotland, formed of a simple plate of bronze, pierced only by a single round opening at the upper part of the blades, and with a simple tang or handle below; next this curious straight double-bladed instrument to which I have just referred, with the handle and space between the blades latticed with open work; and lastly, those with crescentic-shaped blades, the double blade being formed simply by the turning up of the points of the crescent, and the latticed or open worked handle attached to the middle of the crescent below. The Kinleith bronze being apparently a variety in form, its central part between the two blades is also cut into open work, and the simpler handle terminates in an open ring below, like those found in the lake-houses of Switzerland.

Mr Way, I believe, is inclined to think there is considerable probability in the view taken by some antiquaries, that the specimen described by himself, as well as the Irish ones, have been the points of missile weapons. If I may venture to call in question the opinion of so accomplished an antiquary, it seems to me they would have been better fitted for arrow-heads had they terminated in a single, more pointed extremity, instead of double points; and the small circular aperture near this extremity of the blades, would still farther weaken the point of a missile weapon, not to speak of the rather curious fact, that in the instance mentioned by Mr Way, the bronze relic was found along with bronze tweezers and other articles, more suggestive of the toilet than of an offensive weapon.¹

¹ Since this paper was read, Mr Way has published, in the "*Archæologia Cambrænsis*," No. XLVI. for April 1866, a full account, illustrated with figures of the ancient relics found in Anglesea, of which the bronze relic referred to above formed a part, and in this communication he states the opinion of Sir Samuel Meyrick, who considers that the Irish double pointed "bronze arrow-head (as he styles it), appears to have been formed on the same principle as those of the Boisgesmans in South Africa, part of which being poisoned, remained in the wound, for in this way only can I account for the division at the point, and the perforation in which it terminates." One of these poisoned arrows is figured in Skelton's *Illustrations of the Armour, &c.*, at Goodrich Court, vol. ii. plate 148, fig. 5. Mr Way, however, makes the following comment on these remarks:—"It must be observed that there is no apparent similarity of form in this bifid African missile, as compared with the Irish relics."

Mr A. W. Franks, of the British Museum, in his valuable descriptions of the plates of the "*Horæ Ferales*," figures in plate vi. a specimen of these Irish double-pointed bronzes now in the British Museum; but although he places it side by side with arrow-heads, he designates it as "a bronze arrow-head, or possibly cutting instrument," and refers to Wilde's catalogue of the Irish Academy Collection, where they are conjectured to be razors, showing, as it appears to me, that he is by no

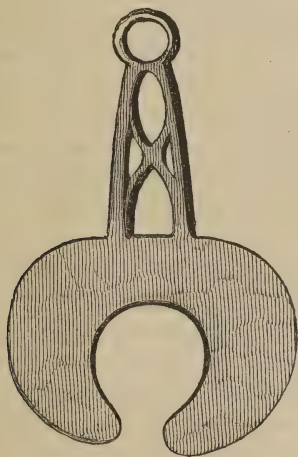


Fig. 6.—Bronze implement, found in the remains of a Lacustrine habitation at Steinberg, near Nidau, Switzerland. (Scale, one-half of size.)

means very decided as to these relics being arrow-heads, but rather leans to the view of their being cutting instruments or razors.

In the paper on the Kinleith bronze I pointed out its general resemblance in size and analogous character to some of the bronze blades of a crescentic form found in the lake-houses of Switzerland (Fig. 6); and have since been favoured with a letter from Dr Ferdinand Keller of Zurich, the well-known historian of the "*Pfahlbauten*," and an Honorary Member of our Society; referring to the remarks in my paper, on the curious crescents formed of clay and stone, which I was

inclined to consider as pestles or grinding instruments, and also to the small crescentic-shaped blades of bronze, he writes me as follows :—

“ I have read with great interest your remarks on a bronze implement in the ‘ Proceedings ’ of your Society. As you refer to a passage in my second report on ‘ Lake Dwellings,’ I take the liberty of communicating to you some further particulars on the subject in question.

“ Both on *terra firma* and in the lake-dwellings of the Lake of Neuchâtel objects of stone or clay have been found which bear a striking resemblance to a crescent, and positively cannot have had any practical use. They are accurately described and figured in my second and fifth reports on ‘ Pfahlbauten.’ I considered them as having a symbolical significance, and am still of the same opinion, although I do not object to any other view concerning them.

“ At the same time small bronze objects were found in the above-mentioned places, which bore a certain resemblance to the former. In the work of Gozzadini, entitled ‘ Di un Sepolcreto Etrusco scoperto presso Bologna, descrizione del Conte Giovanni Gozzadini,’ Bologna, 1855, I saw that similar bronze objects had been found in Etruscan graves, and were described (p. 44) with great learning by Professor Rocchi as being nothing else but razors. (Intorno l’antichità dell’ uso di Radersi la barba.) As I said in my reports, I doubted whether I should conform to this opinion, which certainly appeared very plausible. But as several of these bronze implements were not sharpened, but perfectly blunt, I preferred considering them as mere ornaments in the form of a crescent. At present, after having seen and examined many specimens of various forms, I am inclined to agree with the Italian antiquary and yourself. Last summer I produced six specimens before our society and declared them to be razors. These tools were cast, and afterwards sharpened like the knives and swords of bronze, by hammering, like the scythe.

“ I am persuaded that a personal inspection of the crescents made of stone or clay would convince you that they cannot have served as grinding instruments or pestles, the pedestal being too weak for such a purpose, and only made to support the rest in an upright position. The mixing of fragments of quartz with the clay was intended—firstly, to give the clay greater consistency, and to facilitate the operation of forming

such figures or pots; and, secondly, especially in the case of pottery, to prevent its cracking when exposed to the fire. At the present day the inhabitants of some parts of the Apennines are still in the habit of mixing quartz fragments with the clay used for cooking utensils. The latter are hardened, as in the time of the lake-dwellings, not in potters' ovens, but in open fires, and are not to be distinguished from that ancient pottery. I am in possession of such pots, which were made only last year. In the Roman mortaria the stone fragments are not distributed throughout the mass, but are only seen on the inner surface of the vessel."

("Gozzadini, Nos. 10 and 16, Tav. VI.—Sono due strumenti sottilissimi, già perfettamente levigati, col taglio nella parte convessa soltanto. La forma loro singolare e la sottigliezza, il corto ed esiguo manichetto che non potrebbe tenersi se non con due o al più con tre dita e non saldamente, la parte concava senza taglio anzi quasi sempre conorlo, che potrebbe esser fatta per appoggiarvi l'indice e il medio a stringere contro il pollice l'istrumento per adoperarlo anche in tal guisa, inducono a ricercarne un uso speciale e non commune alle coltella. Quindi per le particolarità sopradette sembrando poco adatti a tagliare ed opportuni a radere, mi corse dapprima alla mente avessero potuto servire ai congiunti del defunto *per radersi lachiuma* in segno di lutto. Poscia mi suggerirono anzi l'idea che quelli potessero essere, non solo pei capelli ma anche *per la barba*, i rasoi degli antichi Italici non anche dimostrati dai monumenti, ni illustrati dagli archeologi," &c. &c.)

Dr Keller kindly sent me sketches of these two bronzes, which show a slight variety in form from the usual crescentic double-bladed bronzes, in which the handle springs from the middle of the convex blade below; while in these crescentic-shaped blades figured by Gozzadini there is a short tang or handle, also terminating in an ornamented ring, which is attached just below or behind the outer or convex edge of the blade, near the extremity of one of the horns of the crescent; the inner or concave outline of the crescent being blunt, so that the finger might rest on it, while the outer or convex border is brought to a fine edge. By this arrangement, however, the bronze has more of the character of a single-bladed knife or razor. I may mention that these relics were also found associated with tweezers.

All antiquaries are familiar with the straight long razor-shaped blades of bronze, ornamented with engraved patterns of galleys and other objects, which taper rapidly towards one extremity, and terminate in a recurved or curled loop of bronze. These relics have been found abundantly in Scandinavia, and figures of them are given in the illustrated Catalogue of Antiquities preserved in the Royal Museum of Copenhagen. Figures of similar specimens, found in the northern countries of the Continent, are given in plate x. of the "*Horæ Ferales*;" and Mr Franks, in his valuable descriptive letterpress, states these "knives or razors are probably later in date than the other implements (figured in the plate). Objects exactly similar, but made of iron, have been found with Danish remains in Ireland; the designs on them are peculiarly Scandinavian, being often representations of their long galleys or ships."

These single-edged bronze blades, then, seem to be totally different in character from the double-edged varieties I have been describing, and none of the double-bladed or bifid bronzes have been found, as far as I am aware, associated with any Scandinavian remains, while they are discovered along with the remains of Celtic races in Ireland, Wales, and shall I say Scotland; the analogous forms of bronzes of a more elaborate character being found in the lake-houses of Switzerland, which antiquaries believe have in ancient times been also in the occupation of a people of Celtic race. These two varieties or classes of small bronze remains may, therefore possibly, be not so much the relics of a different age, as of two distinct families of men; the Northman and the Celt.

It might be curious to learn what are the characters of the various instruments more recently used for depilatory purposes by the different races of men, whether savage or civilised, and to see whether they would throw any light on the supposed use of these small bronze blades which we have been considering; but on this subject I am unable to say anything, and shall simply, in conclusion, refer to a Razor from China, which was kindly sent to me by a friend (a figure of which is given in the annexed woodcut, Fig. 7).

This Chinese razor is formed of a piece of steel, triangular in shape, which curiously enough corresponds nearly in length to the blades of the ancient bronzes we have been describing. The middle of the back

part of the blade is the thickest, and the metal becomes rapidly thinner towards the front or edge of the blade. There is a small short tang or handle which projects slightly backward, at the extremity of the narrower point, or apex of the triangular-shaped blade; this tang is pierced by a pin which connects it to the handle; and the handle is so cut, that when the blade is opened and drawn back the tang is held firmly in its place. The blade measures nearly 3 inches in length by $1\frac{3}{4}$ inch in greatest breadth; and the wooden handle, which is grooved in front to receive the sharp edge of the blade when it is closed, measures $3\frac{1}{2}$ inches in length.

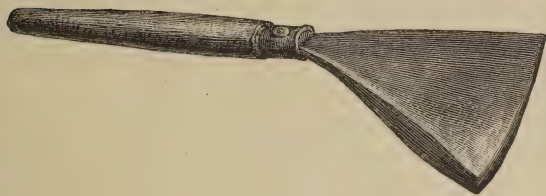


Fig. 7.—Chinese Razor, with wooden handle. (Scale, one-half of original.)

V.

NOTICE OF A BRONZE BATTLE-AXE FOUND NEAR BANNOCKBURN
NOW IN THE MUSEUM OF THE SOCIETY. BY JOHN ALEXANDER
SMITH, M.D., Sec. S.A. Scot.

This beautiful bronze axe was presented to the Museum of the Society on the 20th of May 1850, by Robert Mayne, Esq., who, I understand, purchased it from the family of the finder, in whose possession it had remained, ever since it was discovered in the course of digging peat, or draining the morass at Bannockburn, in the year 1785. (The peculiar and elegant shape of this axe is well shown in the annexed carefully-drawn woodcut, the work of our townsman and clever engraver on wood, Mr John Adam.)

The axe-head is of a rich brown or bronze colour, and beautifully smooth or polished on its surface, which, however, is considerably chipped in some places. It measures $8\frac{3}{4}$ inches in length, and has a rounded head behind, $2\frac{1}{8}$ inches in breadth, in front of which it measures on the side $1\frac{1}{8}$ inch, increasing to $2\frac{1}{4}$ inches, beyond which it expands into the crescentic face, measuring $4\frac{5}{8}$ inches; the greatest thickness across the axe-head at the middle being $2\frac{1}{2}$ inches. The shaft-hole or socket for the handle, measures at the lower part, $1\frac{7}{8}$ inches across, with an opening of $1\frac{1}{2}$ inch inside, which tapers gradually upwards to the top of the pointed projection above the axe-blade, and from the top to the bottom of the socket for the shaft, measures altogether $4\frac{3}{4}$ inches. This tapering projection above, is pointed backwards and rather to one side (the whole axe, indeed, being a little irregular in shape); it is surrounded at its base by an ornamental twisted cord of bronze, and corresponds in character to the solid pointed bosses, one on each side of the blade in front, which project outwards $\frac{5}{8}$ of an inch, and are ornamented in a similar manner by a twisted cord of bronze; each of these cords has, at one point of its circumference, the thickened appearance of a knot, as if its extremities had been tied together. The neck of the socket is pierced by a rivet-hole in front, and another behind,

each $\frac{3}{8}$ of an inch across, for the purpose of attaching the axe-head firmly to the handle. These rivet holes are not, however, cut exactly opposite to one another.

The weight of the axe-head is 4 lbs. avoirdupois.

At the time the donation of the axe-head was made, the Secretary was unfortunately led into the inadvertence of describing it as being formed of iron coated with bronze,—the sharp eyes of my friend Dr Daniel Wilson having apparently been deceived by the blackened appearance of the metal, where its polished or patina-like surface was broken, and also, perhaps, from the ferruginous character of the clay, traces of which remained in the shaft-hole of the axe. Dr Wilson, in his "Pre-historic Annals of Scotland,"—a work which has done much for the archæology of Scotland, and indeed for archæology generally,—also published the statement of the axe being formed of iron coated with bronze; and, possibly from the place where it was found, the great battlefield of Scottish independence, has been all the more naturally led to consider it as a relic connected with that well-fought field.

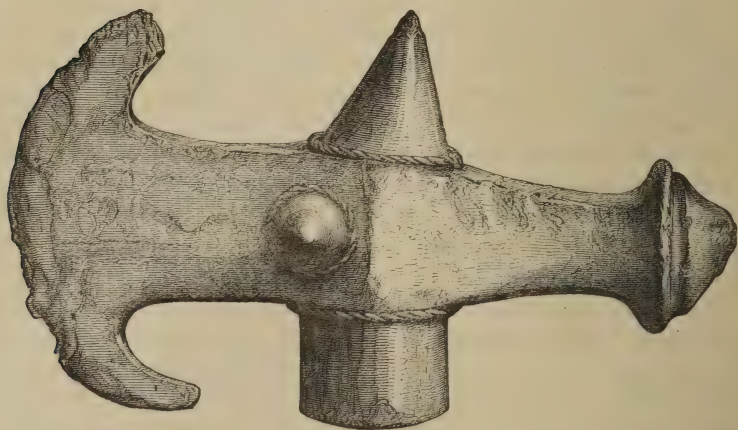
Next, following Dr Wilson, Mr A. W. Franks, M.A., of the British Museum, in the volume published under his joint superintendence, the "*Horæ Ferales*," or "*Studies in the Archæology of the Northern Nations*," in which he has brought together, figured, and described so many groups of interesting relics—a contribution of the greatest value to all students of antiquities. Mr Franks, when he refers to the bronze battle-axes,—different examples of which are figured in plate v. of his work,—states that—

"Heavy bronze axe-heads are found in Italy, Germany, Switzerland, and the eastern parts of France; several Swiss examples are engraved in the '*Transactions of the Zurich Society*,' vol. xiv. part 6, pl. vii.; they seem, however, to be unknown in Great Britain and Ireland. The only exception to this statement is a remarkable weapon found at Bannockburn in 1785, preserved in the Museum (of the Society of Antiquaries) at Edinburgh; but it is composed of iron coated with bronze, and it is uncertain whether it be not a relic of the middle ages. From the decorative character of the ornaments on some of the specimens, it is conjectured they may have been used as war-axes" (p. 147).

This quotation from such an authority shows the extreme rarity, or

rather the total absence of these heavy bronze axes from among the relics of antiquity found as yet in Great Britain and Ireland. I have, therefore, much pleasure in calling special attention to this beautiful specimen of a heavy Bronze War-Axe in our Museum, found in Scotland, which, as tested by the file, is beyond all question formed simply and entirely of a rich yellow bronze, and is therefore unique in its class among the antiquities of our Islands. Though rather unwilling to deprive the Museum of any supposed relic of our famous battle, I cannot but believe that this axe-head belongs, not to mediæval times, but claims a much greater antiquity in connection with the earlier races of our Fatherland.

In the last published Catalogues of the Museum this axe head is described as being formed of bronze ; it was felt to be necessary, however, to call attention to the fact a little more widely, by referring to it, as is now done, for publication in the "Proceedings of the Society."



Bronze Battle-Axe found in a Morass at Bannockburn in 1785.
(Size, $8\frac{1}{2}$ in. in length. Weight, 4 lbs. avoirdupois.)

MONDAY, 12th March 1866.

DAVID LAING, Esq., LL.D., Vice-President, in the Chair.

The following Gentlemen were balloted for and elected Fellows of the Society :—

WILLIAM SMYTHE of Methven, Esq.

DAVID CURROR of Craigduckie, Esq., S.S.C.

HOUSTON MITCHELL of Polmont, Esq., Trinity Lodge.

RESTORATION OF THE SHAFT OF THE OLD CITY CROSS
TO EDINBURGH.

Before proceeding with the ordinary business of the meeting, Mr LAING said,—that, as he had formerly brought under the notice of the Society and Council some proposals regarding the old City Cross, he begged to add a few words on the subject to what has been published in the “Proceedings of the Society” (vol. iv. p. 420).

The shaft of the old Cross, it is well known, had been preserved in the grounds of Drum (then Lord Somerville’s), near Edinburgh, since the year 1756, when the City Cross was demolished. In the sale of this estate a few years ago, the proprietor, Alexander Mitchell of Stow, Esq., had reserved the ancient shaft, and offered it as a gift to the Lord Provost and Magistrates of the city, to be used in the event of the Cross itself being rebuilt. It was desirable, therefore, as so much time had elapsed, that some steps should be taken for having it brought back to its former locality. Its removal had involved much correspondence, and a great deal more trouble and expense than had been contemplated; but the shaft has at length been happily brought back safe, and erected, under the superintendence of David Cousin, Esq., city architect. Its original site must have been near the Luckenbooths, either where Creech’s Land afterwards stood, or towards the west end of the Tolbooth, perhaps at the head of Forrester’s Wynd.

In wishing to secure for Edinburgh this interesting historical memorial, and to place it where it might be seen to some advantage, without encroaching on any thoroughfare; which has now been done by erecting it within the enclosing rail, to the east of the north door, or principal

entrance of the High Church of St Giles; Mr Laing said, that of course no idea was entertained this should be reckoned as a Restoration of THE CROSS of 1617; and therefore, excepting a simple pedestal, any addition was avoided. It might otherwise, according to Mr Drummond's sketch (see "Proceedings," vol. iv. Plate IV.), have been surmounted with a unicorn supporting a shield of arms. This, if wished, can easily be done afterwards, as the great object aimed at was to preserve in an appropriate place the sole existing portion of the ORIGINAL CROSS. Should the Lord Provost and Magistrates, however, at any subsequent time take up anew the scheme for erecting in the centre of the High Street a handsome new structure as THE MARKET CROSS OF EDINBURGH, the old Shaft, required to form part of the architectural design, now remains conveniently at their disposal.

The cordial thanks of the Society were voted to Mr LAING, V.P., for the great trouble, besides the expense which personally he had incurred, in order to accomplish this object.

The following Communications were read :—

I.

NOTICE OF A COLLECTION OF PRIMITIVE IMPLEMENTS OF THE ANCIENT SWISS LAKE-DWELLERS, FROM CONCISE, ON LAKE NEUFCHATEL. BY DANIEL WILSON, LL.D., HON. MEM. S.A. SCOT. PROFESSOR OF HISTORY AND ENGLISH LITERATURE IN UNIVERSITY COLLEGE TORONTO. (PLATE XXI.)

In proceeding to fulfil a promise to communicate to the Society some notice of American Antiquities, I am tempted to turn aside from the indigenous relics of this continent to others, which, though enriching an American collection, illustrate the arts and habits of Central Europe in ages preceding its historical epoch.

It is now twelve years since the attention of Dr Keller was attracted to the discovery of carved deers' horns, stone implements, and other relics of human workmanship, brought to light in consequence of operations resulting from an unusual depression of the waters of the Zurich Lake. The revived attention to the primitive archæology of Europe, and the

direction which certain geological speculations and researches have recently taken, tended to render the period of the discoveries at Zurich peculiarly favourable for their thorough investigation. Since then, accordingly, various highly competent investigators have followed up the first glimpse of the traces of ancient lake habitations in Switzerland with great success. Remains of extensive pile-work, the sites of populous villages and settlements, have been brought to light, and the disclosures consequent on their minute exploration have suggested many ingenious speculations relative to the earliest inhabitants of Switzerland, the condition of animal life contemporaneous with the primitive lake settlements, and the probable date of the first presence of man in the sheltered valleys of that remarkable district of Central Europe.

The correspondence of the lacustrine pile-works of Switzerland to Irish and Scottish crannoges has not failed to attract attention; and though some of the evidence in relation to the latter tends to show that they continued in use down to a comparatively late date, there are many points of resemblance between the two well deserving of minute study. It is interesting, indeed, to find in this, as in so many other instances of recent disclosures in relation to primitive European antiquities, that, although the full significance of the traces of the Scottish lake-dwellers was not appreciated when first brought to light, they have long been noted as objects of exploration by the Scottish antiquary. A letter by Dr John Ogilvie of Forfar, preserved among the earliest communications made to the Society of Antiquaries of Scotland, describes the construction, and some of the contents of a crannoge discovered in the Lake of Forfar, in 1781, in consequence of the lowering of its waters by drainage. One of a set of upwards of thirty carved counters, or tablemen, of bone, found on that occasion, is now in the Society's collection. Silver ornaments, described by Dr Ogilvie as resembling ear-rings, were also met with; and he further describes several very large tusks of boars or wolves, and deers' horns of an extraordinary size.¹ The discoveries in Duddingston Loch at a still earlier date (1778) also included large deers' horns and other animal remains, along with numerous bronze

¹ [In addition to the above, the reader may refer to the Notice of two "Crannoges" in Bute, with Plans. By John Mackinlay, Esq., F.S.A. Scot., in the *Proc. Soc. Antiq. Scot.*, vol. iii. p. 43].

weapons, besides which several human skulls were dredged up, the subsequent disappearance of which, without any record of their typical characteristics, is greatly to be regretted.¹ Traces of piles still standing in the eastern part of the loch invite to further research. The piles and oaken logs found in the Loch of Forfar supplied a striking counterpart to some of the recent disclosures in Switzerland; and those, with the abundant remains of an extinct fauna, clearly indicate an era when the country was still covered with the natural forest growth, and in part occupied by many long extinct animals, and even by some which were supposed until recently to have altogether preceded the presence of man.

During my last visit to Europe, in 1863, I had repeated opportunities, both in France and England, of examining collections illustrative of the character of the remains found in the lacustrine villages of Switzerland. But since my return my attention has been attracted by a curious, and in some respects more valuable collection, formed by Professor Agassiz, and now in the Natural History Museum at Cambridge, Massachusetts. As this collection has been formed under peculiarly favourable circumstances, and lies beyond the reach of most British students of the remains of the ancient lake-dwellers of Europe, a few notes and sketches illustrative of its contents may not be without some interest and value to my old friends of the Society of Antiquaries of Scotland.

The father of the distinguished American naturalist, to whose kindness I owe the facilities I enjoyed for minutely studying the objects now referred to, fulfilled, for a period of fifteen years, the duties of a parish clergyman at Concise, on Lake Neufchatel, where in recent years some of the most extensive and varied traces of the ancient lake-dwellers have been brought to light. On the occasion of Professor Agassiz's last European tour, when visiting his native Swiss canton, and the village parsonage where his early years were passed, it chanced that he found engineers and workmen busily engaged in the construction of a viaduct

¹ Prehist. Annals of Scotland, 2d ed. vol. i. 245. The Duddingston crania were submitted to Dr Munro, by Sir Alexander Dick, soon after their discovery; and at my request Professor Goodsir instituted a careful search for them among the objects preserved in the University Anatomical Museum, which includes a collection formed by Dr Munro; but they were probably in a fragmentary condition, and have not been preserved.

across part of the neighbouring lake, for the completion of a railway then in progress between Neufchatel and Louvaine. Availing himself of the special facilities accorded to the son of their old pastor, by the people of Constance, on his thus revisiting the scenes of his youth, after having won for himself so distinguished a rank among men of science, Professor Agassiz obtained the co-operation of some of the workmen on the railway, and had the bed of the lake dredged over a considerable area in front of the old parsonage. The objects of his search were other than the archæological traces to which I now refer. But he was rewarded by the acquisition of a curious and valuable collection of stone, horn, bone, and bronze implements, along with pottery and other illustrations of the primitive arts of the ancient lake-dwellers, and the skulls, horns, and bones, both of their domesticated animals and of those procured in the chase. Among the latter the red deer and the wild boar appear to have predominated as important sources of food. The locality has since furnished many additional traces of the ancient population; but the researches now referred to were made at an early date, and by workmen actuated by an unwonted zeal in their desire to gratify the wishes of their distinguished visitor. Professor Agassiz was accordingly able to obtain some of the choicest specimens of aboriginal art and constructive ingenuity that have hitherto rewarded explorers in this novel field of research.

Concise, on Lake Neufchatel, has proved one of the richest sources of the weapons and implements of the ancient Lake-dwellers, and in other respects also has rewarded research by much valuable evidence illustrative of the condition of the region and the habits of its occupants in the remote age thus revealed to modern science. M. Troyon estimates the implements of bone and stone recovered on this single locality at 25,000; and this Concise site of the Swiss pfalbauten is only equalled by that of Wangen, on Lake Constance, in the number and variety of stone and flint implements which it has yielded. Sir Charles Lyell has introduced, in his "Geological Evidences of the Antiquity of Man," a restoration of one of the ancient lake villages reared on its platform of piles, as designed by Dr F. Keller, partly from Dumont D'Urville's sketch of similar structures still in use in New Guinea. The loss of weapons and implements among such an aquatic community must have been of common occurrence. Many of the objects obtained by Professor Agassiz

appear to have been dropped from the platforms, and become imbedded in the soft mud accumulated round the piles, from which they are now recovered in a nearly perfect condition, after the lapse of centuries, reaching back, not only to Roman times, but some of them undoubtedly to a greatly more remote date. In a few very rare instances the British or Irish stone celt has been found attached to its handle, as in one example found in the County Tyrone, and figured by Mr Du Noyer in the *Archæological Journal*,¹ and another from County Monaghan, now in the Museum of the Royal Irish Academy.² In both of those examples the process of hafting is not surpassed in rudeness by the most primitive art of modern savages. But the high finish of many of the celts, stone-hammers, and other implements found in British grave-mounds, was no doubt accompanied with a corresponding improvement in the method of hafting; and on this first indication of mechanical ingenuity and artistic progress some of the objects recovered from the ruins of the Swiss lake villages throw an interesting light. I have accordingly made accurate drawings of examples of some of the most ingenious types of different classes of tools, which the following descriptions will render fully available for comparison with corresponding objects in the Scottish collection (see Plate XXI.):—

No. 1 is a rudely formed axe of dark limestone, much chipped, and evidently long in use. Its only value is as an illustration of the rudest art of the primitive stone-workers, resembling in this respect some of the implements found in British graves, or dredged from lake and river beds, and only equalled in rudeness by the most imperfectly executed specimens of modern savage art.

No. 2 is a specimen of a deer's horn socket, which appears to have been the favourite device for adapting the stone celt for use, when required as a chisel, gouge, or spade. This example, like many others dredged up in Lake Neufchatel, is formed from the root of one of the horns, apparently of the red deer, where it swells out immediately above the point of attachment to the skull. The broad end has been hollowed out to receive the stone blade, which must have been secured by means

¹ *Archæological Journal*, vol. iv. p. 3.

² *Catalogue R. I. A.*, vol. i. p. 46, fig. 53.



Phototyped by Messrs Nelson from Drawings by Dr Wilson.

STONE IMPLEMENTS, WITH DEER-HORN HANDLES, &c., FROM A LAKE-DWELLING AT
CONCISE, LAKE NEUFCHÂTEL, SWITZERLAND.

of bitumen or some other tough cement, as is still done by many of the stone and shell-workers of the Pacific. The narrower end is cut into a square tenon, obviously for the purpose of inserting it into a handle, probably of wood.

Horn sockets have been found at Concise in considerable numbers, and designed for adaptation to a variety of tools; while the sites of other lake villages, equally prolific in stone axe-blades and chisels, have disclosed very few; and in some cases, as at Wangen, on Lake Constance, where upwards of a thousand stone axes have been found, not a single horn socket or handle has hitherto been met with, and only a few of wood.

No. 3 is a good specimen of the deer's horn socket, with the small stone chisel to which it was adapted still in its place. The drawing sufficiently shows its form and character. The length of the original, including stone-blade and socket, is $5\frac{1}{2}$ inches.

No. 4 illustrates a smaller form of horn socket, with a knife blade attached to it, made of a hard, pale, greenstone (serpentine). The exposed part of the blade measures 2 inches, and the whole implement $4\frac{3}{4}$ inches long. The ingenuity displayed in the mode of applying the deer's horn as a socket for the axe or knife-blade in implements of this class is obvious; but the object aimed at is less apparent. If the stone blade could be more firmly secured in the deer's horn than in wood, owing to the liability of the latter to warp and swell in its constant exposure to water, among the lake-dwellers, we ought to find the entire deer's horn wrought into the axe handle. Viewing those socketed tools in this light, it appears to me not improbable that the tenon with which they are provided may have been designed to admit of the use of one large handle for a variety of implements, in the same way that a modern carpenter is supplied with sets of blades and chisels of various sizes.

But examples of horn-hafted tools in complete condition are also abundant. In the specimens shown in Nos. 5 and 6, the stone axe or chisel is attached to a horn handle roughly rounded at the upper end, and either intended to be used without any further addition; or, if provided with a wooden handle, it must have been permanently secured to it. In both the examples now shown, however, the hafted implement appears, as I conceive, complete. The horn handles are sufficient to admit of

their being conveniently employed as knives or chisels; and they may fairly be taken as illustrations of the stone implements of this class, applicable to so many wants of a rude hunting and fishing race of lake-dwellers in such a region as that where they have been recovered. These examples measure respectively 6 inches and $5\frac{3}{4}$ inches long.

No. 7 illustrates another class of hafted tools, in which the handle is formed of the upper portion of the deer's horn, where one of the small lateral tynes adapts it for convenient handling as a knife. The blade is of dark serpentine, wrought to a fine edge, and the implement measures altogether 11 inches long; though, as will be seen from the drawing, the point of the longer tyne is broken off.

In No. 8 another highly polished serpentine knife-blade, considerably fractured at the edge from repeated use, has been inserted in a handle of deer's horn, formed, like the previous one, by an adaptation of one of the forks of the antler to the requirements of the tool. But in this example more labour has been expended in adapting the handle for convenient use; and it is completed with a large circular perforation, probably intended for its suspension at the girdle as a *couteau de chasse*. The exposed part of the blade measures nearly 2 inches, and with its handle $6\frac{3}{4}$ inches.

A small, polished stone celt, of a form familiar to the British antiquary, is shown in No. 9, fastened sideways into an antler of the red deer. Its dimensions are so small—the horn handle measuring less than a foot long—that it must have been designed as a tool for more delicate work, such as cutting the horns or wooden implements into the requisite shapes. But it illustrates one of the simplest ways by which this common stone implement was hafted, either with horn or wood; and when on a scale sufficiently large, would fit it alike for use as a carpenter's or woodman's axe, and as a tomahawk.

The implements heretofore described are of stone; but the group to which I now refer consists of flint-blades inserted in a similar manner into sockets or handles of deer's horn.

Implements of flint are much more rarely found in the Swiss lake dwellings than those of stone; and whether in the form of arrow-heads, knife or lance blades, or mere flint flakes, are generally of small size. The absence of any flint-bearing gravel in the vicinity of the lakes, and

the abundance of every variety of stone, fractured into convenient sizes and forms for the tool-maker of the stone period, abundantly account for the apparent preference of the latter.

The first example, No. 10, is a small, highly polished chisel, or knife-blade of cream-coloured flint, wrought to a fine edge, and inserted in a bone socket, which has a large, well-finished square tenon adapting it for attachment to a wooden handle. The unusual breadth of the socket is worthy of notice, so disproportioned to the smallness of the blade, yet carefully shaped so as to adapt it for some special use. It is a tool evidently designed for the most delicate operations of the primitive carpenter or carver, and is still sharp enough to be turned to its original uses. No. 11 is another knife-blade of yellow flint of nearly the same size as the previous example, but less highly finished, and fractured on the edge from repeated use. It is fastened into a horn handle, and measures altogether $3\frac{3}{4}$ inches long. In No. 12 the blade is a flake of dark flint, of the commonest class, chipped into shape, without any polishing or grinding to an edge. This is inserted into a short horn handle or socket, which is hollowed out at the opposite end so as to admit of its being attached to a longer handle, probably of wood.

Another class of implements is illustrated in Nos. 13-16, where blades of bone are inserted into horn handles. No. 13 is a small knife of this class, measuring $3\frac{1}{2}$ inches long, but, like No. 12, with a hollow socket, admitting of its attachment to a larger handle. No. 14 may be described as a long knife or dagger, measuring altogether above a foot long. Nos. 15 and 16 are bone awls or bodkins similarly hafted with horn. The only remaining example shown in the accompanying drawings, No. 17, is the tooth of a hog (*Sus scrofa domestica*), inserted into a handle of deer's horn, much in the same manner as is frequently practised by the North American Indians at the present day, especially with the hard and keen-edged incisors of the beaver and other rodents. The hardness of the enamel rendered such tools greatly superior to any that could be made from the densest horn; while they had the additional advantage of being already perfect as cutting tools, and only requiring to be fitted with a convenient handle.

I see, from the reports of the Society's Proceedings, that you have received from M. Troyon, of Lausanne, one of the deer's horn sockets of

the class described here¹; and also that your attention has been called to the general subject of the remarkable recent discoveries, both in the lakes of Switzerland and the drift gravels of Northern France, by one of your own number specially qualified to do justice to the subject in all its bearings.² Some of those bearings, also, in relation to the antiquity of man, it is apparent from your Proceedings, excited lively discussion, as, from their interest and importance, they were abundantly calculated to do. As, however, they have already engaged your attention, I need not refer to them here, especially as I have already discussed them minutely in my "Prehistoric Man," a copy of the second edition of which I have requested my publisher to forward for the Society's acceptance. Possibly, indeed, the whole subject has already been so thoroughly discussed and illustrated among you, that this contribution may be altogether stale. If so, I must beg my old friends among the Scottish antiquaries to accept the good intention in token of my remembrances of them and their pleasant meetings in which I was once wont to take a part.

The collection from which the above examples have been selected for illustration was dredged up, as I have stated, from the bed of Lake Neufchatel, opposite the village of Concise, along with numerous skulls, bones, teeth, and horns of the red deer, boar, and other animals. The minute observations of MM. Troyon, Morlot, Keller, and others, have thrown an interesting light on the character of the wild fauna, and also of the extent to which the domestication of useful animals had been carried, at a time when the Swiss lake districts were occupied by a people living in lacustrine pile-villages, like those described by Herodotus as occupied by the Pæonians of Lake Prasias, nearly five centuries before the Christian era. Concise alone has furnished examples of the red deer (*Cervus Elaphus*), evidently of unusually large size; of the elk (*Cervus Alces*); the fallow deer (*Cervus Dama*); and the roebuck (*Cervus Capreolus*). Of oxen the bones have been found of the Urus (*Bos primigenius*), now wholly extinct; and of two, if not three, domesticated races,

¹ Donations to the Museum, 12th Jan. 1863.

² "Notices of Remains from the Ancient Lacustrine Habitations of Switzerland, and from the Drift Valley of the Somme." By Prof. G. J. Allman, M.D., F.S.A., Scot.—*Proceedings, S.A., Scot.* vol. v. p. 79.

one of which is the *Bos longifrons*, the remains of which are of common occurrence alongside of Romano-British remains. The bones and tusks of the wild boar indicate an animal of gigantic size; and at least two domesticated varieties are also represented among the remains dredged up from the pile-works of Lake Neufchatel. The great northern bear (*Ursus arctos*), the beaver (*Castor fiber*), and other animals that have long disappeared from the Alpine lake country, or are wholly extinct throughout Europe, are in like manner represented by the bones found among the spoils of the submerged dwellings. They do not, however, include the *Ursus spelæus* or others of the huge carnivoræ of the caves, with the contemporaneous gigantic herbivoræ of the drift, which other disclosures in different localities are supposed to prove the existence of within the human period.

The collection of lake relics formed by Professor Agassiz also includes specimens of two types of pottery. One of these may be presumed to be coeval with the rudest stone implements. It is thick, coarse, and ill-baked; and both in texture and ornamentation corresponds to the rude pottery found in early British barrows. The other type is a thin black ware, well made and burnt, and bearing considerable resemblance to the earthenware ordinarily found in pagan Anglo-Saxon barrows. The latter may be assigned with little hesitation to the same age as the bronze implements, which also occur in considerable numbers among the objects dredged up at Concise and elsewhere among the lacustrine remains.

The specimens in the Cambridge collection include a bronze spear-head of a type familiar to the Scottish antiquary, bronze penannular ornaments, fibulæ, armlets, &c., the majority corresponding to the relics of the bronze period of Northern Europe. Among those is a dilated penannular ring,—a fibula, or possibly an armlet or anklet, with a small ring of the same metal attached to it (see Plate No. XVIII). Others of the bronze pennanular rings—possibly designed for dress clasps or fibulæ—are not solid, but hammered with considerable skill out of thin sheets of bronze, so as to present a massive appearance with little weight or expenditure of metal. They present, along with certain local varieties of type, sufficient general correspondence with the bronze implements and personal ornaments of Britain and Ireland to prove that they are contemporaneous with that later period of Britain's prehistoric

era, when the primitive artist had acquired considerable skill in metal-lurgy, and had also developed an artistic taste of no mean ability, which he expended in shaping the moulds, and fashioning his tools and weapons into a variety of graceful and beautiful forms.

II.

NOTES ON SOME NORTHERN ANTIQUITIES. BY THE REV. JAMES M. JOASS, EDDERTOUN, ROSS-SHIRE, CORR. MEM. S.A. SCOT.

Herewith I beg to send a rubbing from the lower part of the stone with archaic crosses in Eddertoun Churchyard. I think it must have been in the "Notices of Plates" in Mr Stuart's "Sculptured Stones of Scotland," that I saw some reference to these figures as having been noticed long ago, but do not wonder that they escaped the eye of the artist, as they are entirely under the present surface of the ground. I had the earth dug away that I might examine the designs, but it was filled in again after they were copied. The near hind leg of the foremost horse seems to have been altered by the sculptor; the upper outline being the more deeply cut is probably the amendment.

I have lately examined the cup and ring marked stones discovered by my brother near Dingwall, and without anticipating a paper on the subject which he is just about to send to Professor Simpson, accompanied by rubbings and plans, I may mention that I think two of the stones bear markings different from any which I have hitherto seen figured.

On two of the stones forming the inner of two concentric circles at Beaufort (Lovat) I lately observed distinct cup-markings. The diameter of the inner circle is 13 yards, that of the outer 16 yards.

On a hillside a little to the westward of Bonar Bridge, Sutherland, I recently had a large cairn opened, and found it to contain two large and well-formed cists at right angles to each other. They were empty, as was also another peculiarly formed and almost triangular cist in a very large cairn at Skibo, on the northern shore of the Dornoch Frith. Associated with both cairns are many smaller tumuli, evidently of artificial

origin, but so far as I could ascertain they contain no cists, and may have been common graves. Hut circles, generally in pairs, occur both at Bonar and Skibo.

I opened many of the tumuli, which I described as occurring among the hut circles in Strathnaver, near Syre, but found only one cist 5 feet 9 inches long, formed of flattish stones on edge, and roofed with six small cross slabs. It yielded only a small fragment of bone.

I now find hut circles and associated tumuli on almost every southward moorland slope that I examine, both in Sutherland and Ross. When I come upon tumuli I am rarely disappointed in my search for the hut circles, and *vice versâ*.

The only instance which I have noticed of a surrounding wall or fence was at Sword Dale, on the flat north-east of Ben Wyvis, where three hut circles, 34 feet in diameter, and about thirty tumuli, are surrounded by a low fence of stones and turf. I could find no cists there, but in a detached cairn about a mile to the eastward I examined a short cist which had been previously opened, and found in it burnt bones and bits of chevron-marked pottery.

Near Scotsburn, ten miles west from Eddertoun, I lately had several tumuli opened without finding cists. These tumuli, to the number of about one hundred, with eleven distinct hut circles, and two very large cairns, yet unexplored, occur on a moor about a mile long, high on the hillside that overlooks the northern shore of the Cromarty Frith.

On the Mor'aich Mor, a sandy flat to the east of Tain, when examining some sections recently exposed by draining 4 feet deep, I found, near two hut circles, a flint flake near the surface, which is occasionally peat moss of varying depth, overlying, where it occurs, an undulating surface of sand. I also found the skull of a young ox, several bones of a large deer, one tyne of a palmated stag's horn, and the jaw of a large canine animal. All these bones lay beneath the moss, and on a natural shell-bed in which occurred the *Scaphander lignarius*, believed from its size and delicacy of structure to indicate warmer conditions of climate during its existence in such a situation, as well as considerable subsequent elevation of the sea-bottom. The coast line is now three miles distant.

The piece of pumice stone, to which I formerly referred (see page

273), was found in an eirde-house in Strathnaver—the whetstone about a foot deep near the same place. Another eirde-house, ruined, occurs on the opposite side of the Strath.

I have just seen a stone implement formed like the spade on playing cards; it is made of hornblende rock, and is 11 inches long and broad. If meant for a battle-axe, it is uncommonly heavy and rude. It was found in clearing land among tumuli at Rogart, Sutherland.

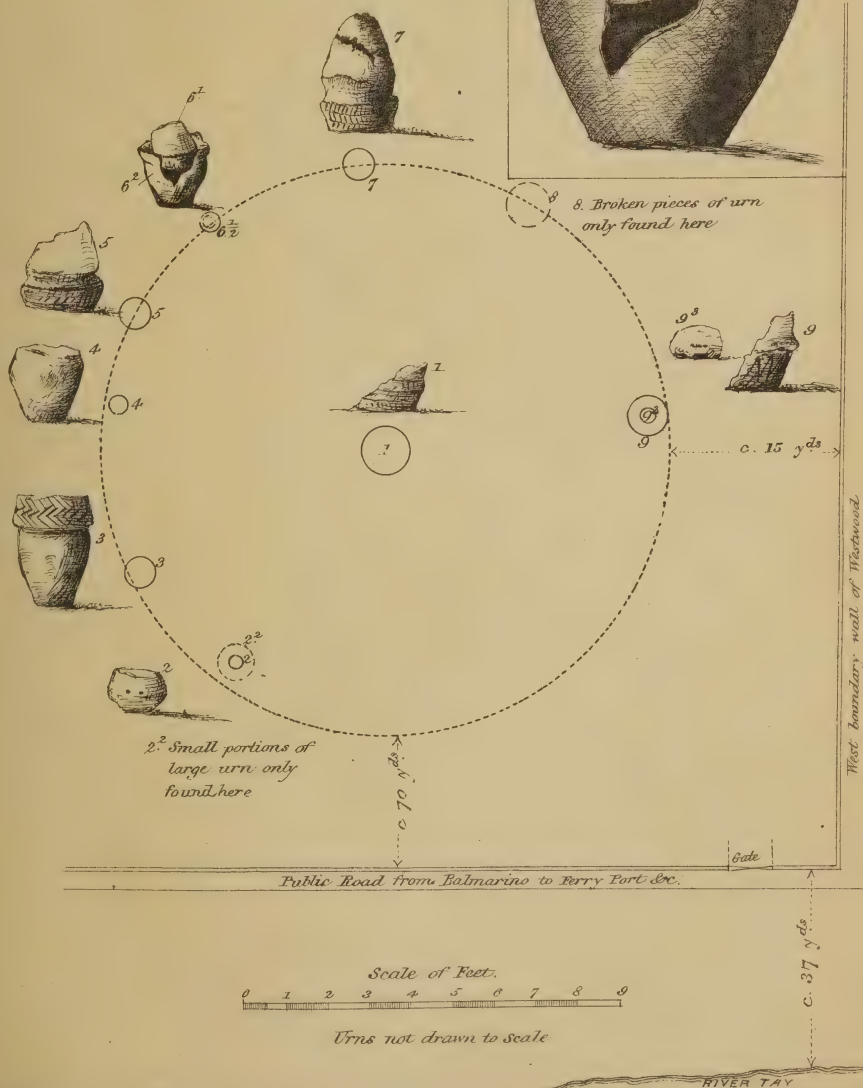
III.

ACCOUNT OF THE DISCOVERY OF A CIRCULAR GROUP OF CINERARY
URNS AND HUMAN BONES AT WESTWOOD, NEAR NEWPORT, ON
THE TAY. BY ANDREW JERVISE, Esq., COR. MEM. S.A. SCOT. COM-
MUNICATED BY JOHN STUART, Esq., SEC. S.A. SCOT. (PLATE XXII.)

About the end of October last, while workmen were trenching the grounds at Westwood, near Newport, the property of Harry Walker, Esq., they came upon traces of an old burial place, in the line of the road or carriage drive to the house which is now being built. Fortunately (although not before some of the urns had been broken and their contents scattered), Mr Walker's attention was directed to "the find," when he ordered special care to be taken of anything that might subsequently turn up. He immediately communicated with his brother-in-law, Mr Neish of The Laws, upon the subject; and, being in the locality at the time, Mr Walker also kindly acquainted me of the circumstance.

Accompanied by Messrs Walker and Neish, and by Mr Berry of Tayfield, I visited the spot in the course of a few days; and as urn No. 4 (on the east side of the circle) had, by Mr Walker's considerate orders, been left in the ground in its original position, I proceeded to remove it, and had the gratification of taking it out entire. It measures 5 inches in height, $4\frac{1}{4}$ inches across at the mouth, and 3 inches at the base. The mouth was placed upwards, and the urn was filled with clammy earth, mixed with small stones or gravel, bits of bones, and charcoal.

PLAN SHEWING THE POSITION IN WHICH
THE URNS WERE FOUND ON M^R. WALKER'S
PROPERTY OF WESTWOOD, NEAR NEWPORT,
FIFE SHIRE. 1865.



8. Broken pieces of urn
only found here

2.² Small portions of
large urn only
found here

c. 15 y^{ds}...

0. 2. 4. 6. 8. 10. 12. 14. 16. 18. 20. 22. 24. 26. 28. 30. 32. 34. 36. 38. 40. 42. 44. 46. 48. 50. 52. 54. 56. 58. 60. 62. 64. 66. 68. 70. 72. 74. 76. 78. 80. 82. 84. 86. 88. 90. 92. 94. 96. 98. 100.

Public Road from Balmarino to Ferry Port &c

Gate

C. 37 γ ds.

Scale of Feet.

Urns not drawn to scale

RIVER TAY

W. & A. K. Johnston, Edinburgh.

Unprotected by stones of any kind, the urn was set upon a hard bed of burnt ashes, from 2 to 3 inches in thickness, and was quite surrounded by the same sort of ashes. The ashes seemed to be composed of burnt twigs, straw, and other vegetable substances, among which were particles of ears of grain or barley, together with small bits of bones. These facts appear to strengthen the supposition that, after the ceremony of burning the bodies was over, and the placing of the bones in the urn or shrine, that the ashes had been carefully gathered and placed into the hole or grave below and around the urn which contained the more important parts of the frame.

I also took the small urn, No. 9³ (which lay on the west side of the circle) out of the remains of a larger one (represented by the fragments No. 9^{1,2}). Like the remains in which it was found, the small urn was in an inverted position; it was placed about $1\frac{1}{2}$ inch from the mouth, near the middle of the large urn, and among mould profusely mixed with bits of bones. The small urn was quite filled, in fact firmly packed, with the bones (now exhibited separately), among which are bits of the cranium, as well as bits of some other of the principal bones of the human body. The singed and rough look of the surface of many of the bones possibly show that they were calcined; while the singularly white appearance of others is somewhat remarkable; and, in that particular, appear to resemble those that were found about the same time near Old Windsor, which are described as being "almost as white as ivory."¹

Urn No. 9 was similarly embedded among burnt ashes as was No. 4, and the workmen state that the whole of those found, whether in a broken or in an entire state, were either protected in the same way, or masses of charcoal were found in their immediate vicinity.

On no previous occasion of investigating tumuli or ancient funeral deposits have I found charred ashes made so evidently to do the duty of protecting urns from the surrounding soil as here. Possibly the expedient had been resorted to in consequence of the want of stone slabs in the locality. Urn (8 upon the plan) was accidentally smashed to pieces: it appears to have been surrounded with charcoal, and contained a large quantity of bones.

¹ *The Times* of 23d Nov. 1865.

The small urn No. 2 (found within the fragments of a larger one, of which small bits were only recovered) was similarly perforated as No. 9³, with two holes upon one side, about an inch apart. It is made of a different kind of clay from its fellow, and is more handsome in shape. It too contained bones, and lay with the mouth uppermost. It was upon the north-east side of, and a little within the circle.

But possibly the most remarkable feature in the discovery was that of the urns numbered 6¹ and 6², where the first (5 $\frac{1}{4}$ inches high) rested upon its base, and in it was placed the latter (6 $\frac{3}{4}$ inches high) in an inverted and reclining posture, as shown in Plate XXII. These were on the south-east side of the circle; and, so far as I could judge, contained portions of adult and infant bones, promiscuously mixed, along with a sprinkling of charcoal, clammy earth, and gravel. Some of these bones also bore the appearance of having been scorched by fire; and, if I am correct in supposing that the bones were those of an adult and child, it may not be unreasonable to conjecture that they were those of a parent—possibly of a mother—and infant.

It ought to be noticed that the style of the manufacture or make of these two urns is somewhat different, the lower one being rather thicker than the upper, while the upper one presents the additional peculiarity of having been coated with a greyish sort of size or similar substance. The ziz-zag ornament round the outer lip of the first appears to have been more carefully formed than that of the latter, which looks like so many unequal lines made by some sharp instrument while the clay was yet wet.

The plan (Plate XXII.), copied by me from a rough but correct measurement made by Mr Hunter, the inspector of works at Mr Walker's house, exhibits the interesting particular of the urns or interments having been disposed in pretty nearly a circle. The circle was 14 feet in diameter, and in the centre lay the fragment No. 1, surrounded by a mass of burnt ashes and charcoal. This appears to have been the largest of all the urns; and due south of it, also in an inverted position, and embedded in charred ashes, was the next largest, No. 7. It is pretty entire, about 14 $\frac{1}{2}$ inches high, 9 $\frac{3}{4}$ inches across at the mouth, and 3 $\frac{3}{4}$ inches at the base. The urns were found at different depths below the surface, varying from 8 to 20 inches; and neither the form nor the ornamentation of

any two of them are quite alike. As already mentioned, they were unprotected by stones; and no stone of any size—slab nor boulder—is to be found in the locality. With the exception of the urns Nos. 2, 3, 4, and 6¹, the others were placed in an inverted position, which shows that different modes of interment were adopted in one and the same circle, points that possibly indicate the deposits to have been made at various periods, if not by different classes of people. Neither urns nor charcoal were found on the north-west side of the circle, so it is just possible that no interment had been made there, tradition and record being alike silent as to the fact of any previous discovery in the same locality.

I am not aware that any parallel cases of the disposition of urns and bones in circles have been got in this country, if we except those sometimes found in connection with stone circles, and those at St Maden's Knowe, near Airlie.¹ In 1825 a somewhat similar distribution of urns was got at Deveril, in Dorsetshire, and these were protected by stones;² while the only instances of one urn being found within another, with which I am acquainted, are those of Deveril Street, and Whitechapel, in London. These latter, it would seem, bore unmistakable evidences of having been made and used by the Romans when in South Britain.³ But although, according to some authorities, the Romans had camps in North Britain at no great distance from Newport,⁴ neither the style of the urns there found, nor, so far as I know, the way in which they were placed in the ground, bore any affinity to kindred works of the Romans.

Like most discoveries of human remains in Scotland, that at Westwood was popularly associated with some supposed conflict or battle. It is much more probable, however, that these urns only indicate the burial-place of early owners or inhabitants of the district who had died peacefully in their own rude huts, and been interred by the hands of relatives

¹ Proceedings, vol. v. p. 356.

² Wright's "The Celt, the Roman, and the Saxon," p. 66.

³ Archæologia, vols. xxvi. p. 470; xxvii. pp. 403-412.

⁴ Roy's Military Antiq., p. 130; Chalmers' Caledonia, vol. i. pp. 110, 168-9 Sibbald's History of Fife, p. 68.

or friends in the singularly careful and systematic way which the discovery of the remains has brought to light.

It is probable, from the many natural advantages which the site affords, that the neighbourhood had been peopled at a very remote period, and by men well skilled in the useful arts. On the west, south, and east, lay vast tracks of hill, dale, and marsh, which doubtless had been well stocked with most of the animals of the chase then known to Scotland; while the Tay, not only favourable for the then essential purpose of fishing, also formed a short and easy means of communication between the inhabitants and the opposite shores of Perth and Angus.

Westwood lies on the south bank of the Tay, upon the lands of Seamills, or Seymills, which were anciently a portion of the estate and barony of Inverdovat. The site commands an interesting and extensive view of the counties of Perth and Forfar, with the populous town of Dundee. The ground slopes rather rapidly towards the south and east, where it is bounded by a burn, which runs through a pretty dell. Mr Berry of Tayfield (the modern name of the lands of Seamills), says that about 1855, while workmen were holing trees near Westwood, they came upon a sarcophagus or stone coffin, composed of rude undressed flags of whinstone; it contained bones, but no urn. It also appears that some twenty years prior to that date, when Mr Berry's father was bringing a piece of ground into cultivation, which occupies the heights south of the farm steading of Northfield (about a mile east of Westwood), traces of a *circular* work were found, called a "Roman camp" (?): As such it is set down upon the Ordnance Survey map. This work was composed of earth, with a cairn of stones in the centre, in the middle of which a stone coffin was got containing a great quantity of bones. The coffin was of a large size, made of roughly polished yellow sandstone.¹ One of the slabs, which stands near Tayfield House, is about 6 feet long, 4 feet broad, and 6 inches thick. Possibly this is the heap or cairn of stones mentioned in a charter, dated about 1260, by which Richard of Lascels grants three acres from his lands of Frereton to the canons of St Andrews: "et congeriei lapidum juxta viam de Inuerdoueth versus Sanctam

¹ From Notes by John Berry, Esq. of Tayfield, to H. Walker, Esq.

Andream ex tercia.”¹ The locality of the so-called “Roman camp” rather favours this supposition.

These lands are situated in the parish of Forgan, anciently called Adnauctan and Nechtan.² There also appears to have been a chapel at “Seymills,” dedicated to St Thomas;³ but, although mentioned so late as 1690, the site of it is now unknown. The mother church of Athnathan, or Forgrund, with its chapel, were given to the canons of St Andrews by Patrick of Hay and Marjory of Lascels—gifts which the said Marjory confirmed by charter, dated at St Andrews, in October 1266.⁴

The Lascels, or Lessels, are the first recorded proprietors of Inverdovat, or Seamills, and the lands continued to be held, in part at least, by persons bearing the same surname, until after the year 1560.⁵ Its future proprietary history may be briefly given from notes of the progress of the estate kindly furnished by Mr Berry. It would appear by these that the lands were acquired by James, brother-german to Robert, Lord Elphinstone, 12th November 1599, from whose heirs they passed to the family of Hamilton, through the marriage of Ann Elphinstone with John Hamilton of Murehouse, whose eldest son succeeded to Inverdovat. On 8th February 1664, James Hamilton had a Crown charter of the lands of Inverdovat and the mill of Seamylls, in the baronies of Newtown and Naughtown. In 1712 the above portions of the lands of Inverdovat became united in the person of Gavin Hamilton and his son, with the other two portions of “Lyhton lands,” or the “Bank of Inverdovat,” which Hamilton had acquired from the old family of Nairn of Sandford, or St Fort. Hamilton, who subsequently assumed the name and title of Inglis of Murdieston, sold the lands to James Walker, physician in Edinburgh, in 1758. In 1782 Walker’s trustees sold the property to John Lyon, merchant in Dundee; and in

¹ Reg. Prior. S. Andree, p. 274.

² Reg. Prior. S. Andree, pref. xxxix. pp. 106, &c. Some writers say, upon what authority I am not aware, that the old name was *St Phillans*, and that the church was inscribed to that saint.—*Stat. Acct. (Old)*, vol. xvi. p. 88; (*New*), p. 505.

³ Inq. Speciales (Fife), No. 406, &c.

⁴ Reg. Prior. S. Andree, pp. 108–9.

Inq. Speciales (Fife), No. 42.

1788 Lyon sold it to John Berry, of Wester Bogie, grandfather of the present proprietor.¹

One word in conclusion, by way of thanks to Mr Walker for the very courteous manner in which he gave every facility to my inquiries while investigating into those singularly interesting deposits, but for which the curious features of "the find" might have been lost to our knowledge,—as well as for his so handsomely presenting the urns and bones, along with excellent photographs of the former, to our National Museum of the Antiquaries of Scotland.

IV.

NOTE REGARDING CIST AND URN FOUND AT INVERGOWRIE.

By ANDREW JERVISE, Esq., Cor. MEM. S.A. SCOT., BRECHIN.

On 17th November 1860, while the line of railway was being made from Dundee to Lochee, a stone cist was found upon the farm of Mill of Invergowrie, in the highest of a series of hillocks or knowes, composed of gravel and sand. The site is about 150 yards east of the well-known monolith called the "Paddock Stane;"² and the coffin was from 18 to 20 inches deep, about 4 feet long, and 18 inches broad. It was constructed of rude freestone slabs, and upon the cover or top was a rough boulder of from six to seven cwt. The coffin, which contained bones, lay from east to west, and an urn of baked light-coloured clay was in the south-east corner of it. The urn contained some black damp mould, and rested upon its base. It is $5\frac{3}{4}$ inches high, 6 inches across the mouth, and $2\frac{3}{4}$ inches at the base. To the height of 3 inches from the bottom it bears a closely set zig-zag ornament, then a band of about an inch broad, upon which is a plain spotted pattern, and four low unpierced nobs, or ear-looking projections.

The hillock was thoroughly searched and levelled when the urn was

¹ Robertson's Index, pp. 144, 147, 152; and Inquisitiones Speciales (Fife), Nos. 406, 1233, 1303, afford some additional particulars regarding the old proprietors of Inverdovat and Seymills.

² Proceedings, vol. ii. p. 443.

found, but no other coffin or urn was got in it. Stone cists, without urns, have been discovered in the most of the hillocks which adjoin the one above-mentioned, and these hillocks have all been levelled and destroyed in the course of railway operations.

The urn, which is nearly entire, and rather a good specimen—not very dissimilar in its general appearance from that which was found at Murley Well¹—is carefully preserved in a glass case by Mr Wilson, tenant of Charleston of Invergowrie, upon whose farm it was found, and from whom I learned the particulars of its discovery—a fact briefly referred to at p. 216 of this volume.

MONDAY, 9th April 1866.

DAVID LAING, Esq., LL.D., Vice-President, in the Chair.

The following Gentleman was balloted for and elected a Fellow of the Society :—

JOHN B. GREENSHIELDS, younger of Kerse, Esq., Lesmahagow.

The following Gentlemen were elected Corresponding Members :—

JOSEPH ANDERSON, Esq., Wick.

THOMAS B. GRIERSON, Esq., Surgeon, Thornhill, Dumfriesshire.

The Donations to the Museum and Library were as follows, and thanks were voted to the Donors :—

(1.) By PATRICK A. FRASER of Hospitalfield, Esq., Arbroath, F.S.A. Scot.

Large Mass of Greyish Granite of oblong shape, measuring 2 feet 4 inches in length, 2 feet in breadth, and 12 inches in thickness, its upper surface hollowed into a concavity; apparently used for rubbing grain, or as a grinding or polishing stone.

Six rounded Balls or Pebbles of Quartz, the natural surface being abraded by attrition, probably corn crushers, which may have been used

¹ Proceedings, vol. v. p. 81.

in the grinding stone described above. They measure from $2\frac{1}{2}$ inches to 5 inches in diameter.

Two fine grained Stones of Greenish Colour, partially rubbed on the sides; probably used as polishers. One measures 3 inches, and the other $2\frac{1}{2}$ inches in length.

Small Circular Disk of Mica Schist, measuring 2 inches in diameter, pierced with a hole in the centre.

Fragments of Wood Charcoal from 2 to 3 inches in length.

These various articles were found in hut circles at South Persie, in Strathardle, Perthshire. (See Communication, page 402).

Irregularly-shaped Portion of Grey Granite, 12 inches long by 12 inches in breadth, and $3\frac{1}{2}$ inches in thickness, with a circular cup-shaped depression cut on its upper surface.

Flat round-shaped Disk of Chlorite Schist, measuring 4 inches in diameter, pierced with a perforation through its centre.

Portions of Earth mixed with Calced Bones; and Fragments of Unburnt Bones of an Animal. Found in the "Greycairn" at Balnabroch, Strathardle.

Fragment of Bronze Wire measuring 5 inches in length, apparently the stalk of a brooch or pin. Found in a hut circle near the "Greycairn," Balnabroch.

(2.) By the Rev. J. M. JOASS, Eddertoun, Corr. Mem. S.A. Scot.

Small Fragments of Burnt Bone, pieces of Charcoal, and portion of a Bronze Pin, 2 inches in length, covered with patina; found in a short cist at Eddertoun, Ross-shire. (See Communication, page 418.)

(3.) By GEORGE BUIST of Ormiston, Esq., Fife.

Oblong Stone or Hammer, 9 inches in length, 4 inches in breadth, and $1\frac{3}{4}$ inch in thickness, with a perforation or haft-hole through its centre. It is partially chipped at each extremity, as if from use.

Celt of fine grained Greenish-coloured Stone, 3 inches in length and 2 inches across the face, found in the fields of Ormiston Farm, parish of Abdie, Fifeshire.

(4.) By J. R. ROBINSON, Esq., Dewsbury, F.S.A. Scot.

A leaf-shaped Arrow-head, 2 inches in length, of brownish-coloured flint, and 6 other rudely formed Arrow-heads or Flakes, from $\frac{3}{4}$ ths of an inch to $1\frac{1}{2}$ inch in length; of brown and light coloured flint; found in Ireland.

(5.) By ROBERT A. VEITCH, Esq., Greenhill Bank, Edinburgh.

Rudely formed bowl-shaped Sepulchral Urn, of yellowish-coloured clay, a little contracted towards the mouth. It measures $3\frac{1}{2}$ inches in height and 4 inches in diameter at the mouth, and is ornamented with a pattern of short sloping lines on the upper part, and rude punctures below. It was found 7 feet below the surface, in the course of the formation of the drainage for the new villas at Borroughmuirhead, Morningside.

(6.) By Mr JOHN HUGHES, through ANDREW COVENTRY, Esq.

Large Iron Key, 9 inches in length, cut for numerous wards (figured in the annexed woodcut.) The stem is in two pieces, which are joined together by a screw. The whole key appears to have been richly gilt. It was found among the ruins of Barnbogle Castle, Linlithgowshire.



Iron Key found at Barnbogle Castle. (Scale, one-quarter of the original.)

(7.) By A. W. FRANKS, Esq., A.M., British Museum, F.S.A. Scot.

Two Penannular Rings of Gold Wire, slightly thickened at the extremities; each measuring $\frac{7}{8}$ of an inch in diameter. They were brought from the Province of Cauca, New Granada, South America.

(8.) By ALEXANDER WHYTE, Esq., F.S.A. Scot., South Queensferry.

Penny of Edward II.—EBOR—found near the old church of Queensferry.

Groat of Queen Elizabeth.

Penny Scots, King Charles II., found at Abercorn Church.

First brass of the Roman Emperor Gordianus III.

(9.) By D. H. ROBERTSON, M.D., F.S.A. Scot.

A Forged "One Pound" Note of the Commercial Bank of Scotland, Edinburgh, 1826.

(10.) By Lieut.-Colonel FORBES LESLIE, F.S.A. Scot. (the Author).
The Early Races of Scotland, and their Monuments. 2 vols. 8vo.
Edinburgh, 1866.

(11.) By DAVID BALFOUR, of Trenaby, Esq., Orkney, F.S.A. Scot.

Portion of the Branch of a Tree, measuring 2 feet 10 inches in length, and from 4 inches to 5 inches in diameter, with a rounded perforation at each end, apparently made by fire. It is described by the donor as a yoke for oxen, and was found under 6 feet of peat in the White Moss, a short way south-east from the "standing-stone" of Shapinshay, Orkney.



Yoke for Oxen (?) found near Shapinshay, Orkney.

(12.) By CHARLES LAWSON, Jun., Esq., F.S.A. Scot.

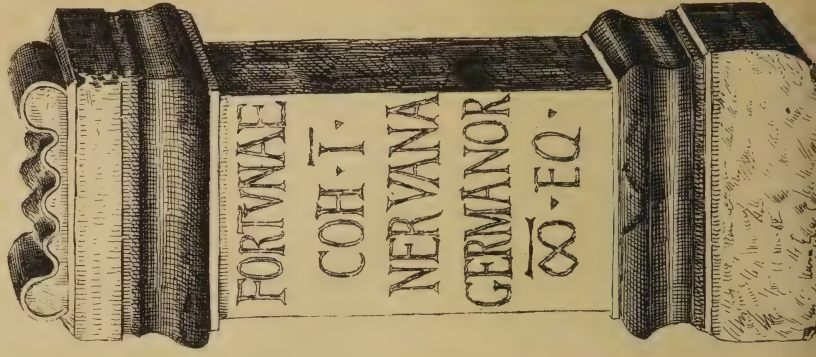
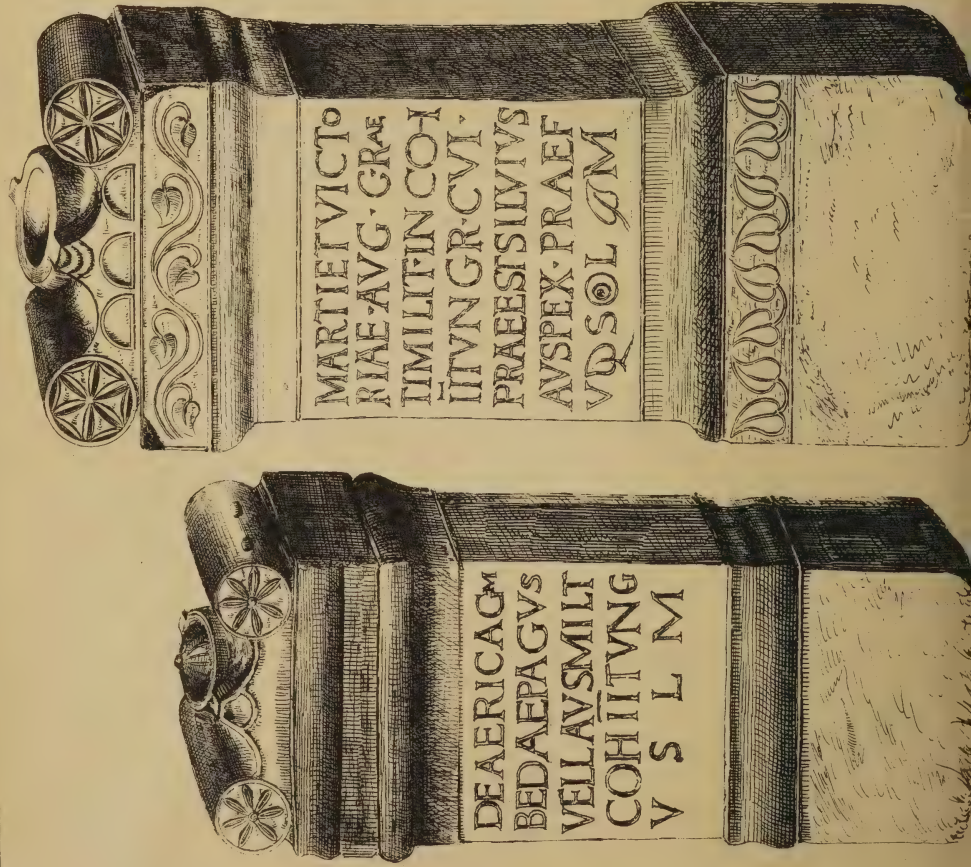
Sketch of the History of the High Constables of Edinburgh; with Notes on the Early Watching, Cleaning, and other Police Arrangements of the City. By J. D. Marwick, City Clerk of Edinburgh, F.S.A. Scot. 4to. *Printed for private circulation.* Edin. 1865.

(13.) By His Grace The DUKE OF NORTHUMBERLAND, F.S.A. Scot.

Memoir written during a Survey of the Eastern Branch of the Watling Street, in the County of Northumberland, from Bewclay, near Portgate on the Roman Wall, to Berwick-upon-Tweed. Surveyed by Henry MacLauchlan. 8vo, and folio plates. Lond. 1864. *Printed for private circulation.*

(14.) By ANDREW GILLMAN, Esq., F.S.A. Scot.

An Account of what appeared on opening the Coffin of King Charles I. in the Vault of King Henry VIII. in St George's Chapel at Windsor, 1st April 1813. By Sir Henry Halford, Bart. 4to. Lond. 1813.



(15.) By the COMMISSIONERS for Publishing the Ancient Laws and Institutes of Ireland.

Ancient Laws of Ireland—Senchus Mor. Introduction to Senchus Mor, or Law of Distress, as contained in the Harleian Manuscripts. 8vo. Vol. I. Dublin, 1865.

(16.) By the SENATUS of the UNIVERSITY of EDINBURGH.

There were exhibited and deposited in the Museum, Four Roman Altars found at Birrens, Dumfriesshire; and a Cast in Plaster of the Rosetta Stone.

The altar No. 1 measures 3 feet 9 inches in height, and 16 inches in breadth, with mouldings at the top and bottom. No. 2 measures 4 feet 3 inches in height, and is 20 inches in breadth. No. 3 measures 4 feet in height, and 15 inches in breadth. (See Plate XXIII. figs. 1-3.) No. 4 measures 3 feet in length, and 15 inches in breadth. They are respectively inscribed:—

| | | | |
|---------------|-----------------|----------|----------------|
| DEAERICAGAM | MARTI ET VICTO· | FORTVNAE | D I B × D E |
| BEDAEPAGVS | RIAE·AVG·C·RAE | COH·I· | A B × Q × |
| VELLAVS MILIT | TIMI LIT·INCOH | NERVANA | O M N I B |
| COHII TVNG | II TVNGR·CVI· | GERMANOR | FRVMENT |
| V·S·L·M· | PRAEEST SILVIVS | E Q | IVS MIL·COHII· |
| | AVSPEX·PRAEF | | TVNGR |
| | V·S·L·M· | | |
| No. 1. | No. 2. | No. 3. | No. 4. |

The following notice of three of these altars is from Mr Roach Smith's "Collectanea Antiqua," vol. iii. page 202, where they are figured as plate xxxiii.

"Birrens, the *Blatum Bulgium* of the Itinerary of Antonius, is a strongly entrenched camp, situated a little to the south of Middleby Kirk, on the river Mein. A plan of the station is engraved in Roy's 'Military Antiquities,' and most of the inscriptions found there in earlier times have been collected and published by the late Mr R. Stuart, in his 'Caledonia Romana.'

"No. 1 (Plate XXIII. fig. 1) presents some little difficulty in the first line, as it refers to one of those local deities, of whom we have so many examples, often troublesome to appropriate. I propose reading it thus:

'To the Goddess *Ricamaga* of the district (*Pagus*) of Beda, Vellaus, serving in the second cohort of the Tungri, in discharge of a vow willingly dedicates.' The *Beda Pagus* was a tract on the line of the Roman road from Treves to Cologne, some trace of the original name of which is retained in that of its modern representative Bitburg. In this region was a station or town called *Rigomagas*, or *Ricomagus*; and to this place, I suspect, may the goddess of the Birrens altar be referred; especially, as the dedicatory was a Tungrian. The word *Pagus* is not unfrequently found in the sense in which it here appears, in similar inscriptions. Mr Stuart gives one, copied from Pennant, and also found at Birrens, which was erected, also by a Tungrian, to the goddess of Viradesthian (?) Pagus.

"No. 2 (fig. 2). I would suggest the following reading, emending that given by Dr Wilson in the 'Prehistoric Annals of Scotland,' vol. ii. page 70, only as regards the name of the person who erected the altar: *Marti et Victoriæ Augustæ C. Rætius militaris in cohorte secunda Tungrorum cui præest auspex Silvius Præfectus votum solvit lubens merito.*

"The Tungri are mentioned by Tacitus, together with the Batavi, as being in Britain under Agricola: from numerous inscriptions, they appear to have been actively engaged in the province, down to a late period; at the time of the compilation of the *Notitia*, the first cohort was at Bocovricus; and another, possibly the second, at Dubris.

"No. 3 (fig. 3) is an Altar to Fortune, erected by the first cohort of the Nervii; or as the inscription reads, by the first Nervian cohort of the Germans. In the inscription on the fourth altar, this cohort uses the same remarkable style. The solution is afforded by Tacitus, who informs us that the Nervi and the Triviri were proud of their descent from the Germans: *circa adjectionem Germanicæ originis ultro ambitiosi sunt.* Thus, by the aid of this historian, we are enabled completely to understand in these inscriptions a style used by the Nervii, which hitherto was somewhat ambiguous."

The following reading of the Fourth Altar (No. 4), is given by Dr D. Wilson, in his "Prehistoric Annals," vol. ii. page 70:—"DIIS DEABUSQUE OMNIBUS FRUMENTIUS MILES COHORTIS SECUNDÆ TUNGROUM."

The Cast in Plaster of the ROSETTA STONE, is one of four made in the year 1802, and was presented to the University by the Society of Antiquaries of London. The stone was found by the French engineers

while repairing the ruins of Fort St Julien, near the mouth of the Nile, on the Rosetta branch. It was taken possession of by General Menou by whom it was given up to the British army after the capitulation of Alexandria, Egypt. (See account of the Rosetta Stone, published by the Society of Antiquaries of London. 4to, 1811.)

The Rosetta Stone is of black granite or basalt, and measures 3 feet 2 inches in length and 30 inches in width. On its surface are incised three distinct inscriptions, the one at the top being in Hieroglyphics; the second, or centre one, in Enchorial characters, or those used by the people of the country; and the third in Greek. According to the Greek inscription, the stone was erected in the reign of Ptolemy Epiphanes, about 193 years before the Christian era.

(17.) By the HERITORS and KIRK SESSION of the Parish of Scoonie, Fifeshire, through the Rev. J. BLACKWOOD.

There was exhibited and deposited in the Museum a sculptured slab of sandstone, measuring 3 feet 6 inches in length, 2 feet 4 inches in breadth, and 4 inches in thickness. It was found in the old parish churchyard of Scoonie, about a quarter of a mile to the north of the town of Leven. The stone displays on the upper part the so-called "Elephant," or beaked animal, its extremities terminating in scrolls; and below it apparently a deer hunt; a rider on horseback, and in front of him a dog on the point of seizing a full antlered stag with (if not merely a subsequent marking on the stone) a javelin apparently buried in its side; below these is another horseman, and in front of him a dog, and below the dog a third horseman. At the lower angle of the stone is cut a small cross. Along the whole left margin of the stone is incised an ogham inscription. On the reverse is sculptured a Latin cross, with a plain circular disk in the centre, and the limbs filled up with interlaced rope or knot work; the scroll termination of a nondescript animal (like the dog-headed animals on the Ulbster and Brodie Stones, as figured in the "Sculptured Stones of Scotland," vol. i. plates xxii. and xl.), appears over the left limb of the cross. The stone itself is figured in vol. ii. plate xii. of the same work; the whole sculpturing is rather indistinct in character.

The following Communications were read:—

I.

ACCOUNT OF EXCAVATIONS IN GROUPS OF CAIRNS, STONE CIRCLES,
AND HUT CIRCLES ON BALNABROCH, PARISH OF KIRKMICHAEL,
PERTHSHIRE, AND AT WEST PERSIE, IN THAT NEIGHBOURHOOD.
By JOHN STUART, Esq., Sec. S.A. Scot.

A description in the old Statistical Account (repeated and amplified in the first volume of Chalmers' "Caledonia") of the remains at Balnabroch, long ago excited my interest in them, and an inspection of the locality in the autumn of 1864 increased my desire for their investigation. The notice in the Statistical Account is as follows:¹—

"In the middle of a pretty extensive and elevated heathy moor stands a large heap of stones, or cairn, 90 yards in circumference, and about 25 feet in height. The stones of which it is composed are of various sizes, but none of them, as far as they are visible, large; and appear to have been thrown together without order. They are in a good measure covered with moss, and in some parts overgrown with weeds. This circumstance argues the great antiquity of the cairn; for the circumjacent ground being covered with heath, and of a firm mould, a long time must have elapsed, before so much earth or dust could have been collected by the wind, and lodged among the stones, as to form soil for the nourishment of plants. Round this cairn are scattered, at different distances, a great number of smaller cairns. They are generally found in groups of eight or ten together. They are all covered more or less with moss or heath. About a furlong to the westward of the great cairn are the vestiges, quite distinct, of two concentric circular fences of stone, the outer circle being about 50 feet, and the inner about 32 feet in diameter. There are also the vestiges of six, perhaps more, single circular enclosures of stone, from 32 to 36 feet in diameter, lying at different distances in the neighbourhood of the cairn. Two parallel stone fences extend from the east side of the cairn, nearly in a straight line, to the southward, upwards of 100 yards. These fences are bounded at both extremities by small cairns, and seem to form an avenue or approach to the great cairn of 32 feet in breadth. There can be little doubt that all these are reliques of Druid-

¹ Sinclair's Statistical Account of Scotland, vol. xv. p. 516.

ism; that the great cairn is one of those at which they celebrated their solemn festivals in the beginning of summer and the beginning of winter, when they offered sacrifices, administered justice, &c.; and that the circles and lesser cairns must have been the scenes of some other religious rites, of which the memory and knowledge are now lost. Similar cairns are to be seen in the neighbouring parishes, and in different parts of the Highlands; but this parish has to boast of a more uncommon and remarkable monument of Druidical superstition.

“About a mile N.E. from the above mentioned great cairn, on a flat-topped eminence, surrounded at some distance with rocky hills of considerable height and steep ascent, stands one of those rocking stones which the Druids are said to have employed as a kind of ordeal for detecting guilt in doubtful cases. This stone is placed on the plain surface of a rock level with the ground. Its shape is quadrangular, approaching to the figure of a rhombus, of which the greater diagonal is 7 feet, and the lesser 5 feet. Its mean thickness is about $2\frac{1}{2}$ feet. Its solid contents will therefore be about 51,075 cubical feet. As it is of very hard and solid whinstone, its weight, reckoning the cubical foot at 8 stones 3 pounds, may be reckoned to be 418 stones 5 pounds, or within 30 pounds of 3 tons. It touches the rock on which it rests only in one line, which is in the same plane with the lesser diagonal, and its lower surface is convex toward the extremities of the greater diagonal. By pressing down either of the extreme corners, and withdrawing the pressure, alternately, a rocking motion is produced, which may be increased so much that the distance between their lowest depression and highest elevation is a full foot. When the pressure is wholly withdrawn, the stone will continue to rock till it has made 26 or more vibrations from one side to the other, before it settles in its natural horizontal position. Both the lower side of the stone and the surface of the rock on which it rests appear to be worn and roughened by mutual friction. There is every reason to suppose, from the form and relative situation of the surrounding grounds, that this stone must have been placed in its present position by the labour of men. It will hardly be thought, therefore, an extravagant degree of credulity to refer its origin to the same period with those other tribunals of a similar construction, mentioned by writers who have treated of the customs of the ancient Celts. This opinion is, how-

ever, the more confirmed from finding, in the neighbourhood of this stone, a considerable number of other Druidical relics. On the north side of the stone, at the distance of 60 yards, on a small eminence, are two concentric circles similar to that already described, and a single circle adjoining to them on the east side. Beyond this, at 37 yards distance, on another small eminence, is another pair of concentric circles, with a single one adjoining to them on the east side. Beyond these, at 45 yards distance, is a third pair of concentric circles, with their adjacent circle on the east side. Farther on to the north-east, at the distance of 90 yards, is a single circle, and beside it, on the west side, two rectangular enclosures of 37 feet by 12; also a cairn 23 or 24 yards in circumference, and about 12 feet high in the centre. Several small cairns are scattered in the neighbourhood: 120 yards west from the rocking stone is a pair of concentric circles, with a small single circle beside them of 7 feet in diameter. All the pairs of concentric circles are of the same dimensions, the inner one being about 32 feet, and the outer about 45 or 46 feet in diameter; and all of them have a breach or doorway 4 or 5 feet wide on the south side. The single circles are, in general, from 32 to 36 feet in diameter, and have no breach. The vestiges of all those structures are perfectly distinct, and many of the stones still retain the erect posture in which all of them had probably been placed at first. Cairns and circles similar to those described are to be seen in other hills of this parish, particularly between Strathardle and Glenderby. The elevated situation and cold exposure in which these ruins lie have preserved them from being ever disturbed by the plough, which has effaced, and probably destroyed ruins of the same kind in other places. There are likewise several tall erect stones, called here in Gaelic *Crom-leaca*, or *Clach-shleuchda*, *stones of worship*. Some of these are 5 and some 6 feet above the ground, and may be sunk a considerable way under the surface, from their remaining so long in the same position; for a superstitious regard is paid them by the people, none venturing to remove them, though some of them are situated in the middle of corn fields."

Through the kindness of Mr Allan Fraser of Blackcraig, I was enabled to make a thorough examination of these and other neighbouring remains in the month of September last. The permission of Mr Hagart, the proprietor of Balnabroch, was readily obtained, and a band of between

twenty and thirty workmen was placed at my disposal for three consecutive days, with an intimation that I need not hurry my operations, and that the men were at my disposal till the necessary operations were thoroughly completed. The workmen entered thoroughly into the spirit of the work, and, while eager for discoveries, were careful in carrying out the instructions for watchfulness. Many of the workmen were servants sent by Mr Fraser, Mr Trotter of Woodhill, Mr Constable of Balmyre, Mr Macdonald of Ballintuim, and the number was made up by labourers hired by Mr Fraser.

The moor of Balnabroch probably has been the site of an early fortified site or "Broch," of which, however, no memory is preserved. It is a platform at the west end of the base of the Knock of Balmyre, and slopes down to the Water of Ardle, which runs to the south through a narrow glen. The remains on the moor and its neighbourhood seem to attest the existence of an early and considerable population settled here. Cultivation has been encroaching on all sides, and many cairns and hut circles have been obliterated within a recent period. The appearance which the moor still presents is very impressive. In the centre a cairn of enormous dimensions lifting up its weatherbeaten crest; and on the west, north, and east sides are many flat cairns and hut circles, of varying size and design; and on the east is a circle of pillars.

The central cairn goes by the name of the GREY CAIRN, and is described as formerly measuring 90 yards in circumference and 25 feet in height. The popular belief is that a mermaid is buried beneath it. This mermaid used to throw stones at people who were coming from church at Kirkmichael, and she could only be seen through a hole in the knot of the pine tree. At last she was chased to the hill at Balnabroch on her flight to the waters of Loch Marech, on the other side of the hill, and there killed, when the Grey Cairn was raised over her.

It was plain, on looking at this cairn, that an earlier examination of it had been made, and on inquiry I found that it had been conducted by Dr Wise and Principal Campbell of Aberdeen, a few years ago. At this time a passage formed of slabs on or slightly above the surface of the ground, so large that a person could creep into it, led from the outer side towards the centre of the cairn. According to Dr Wise's statement it led to no chamber. No trace of this passage remained.

The stones of the cairn were all turned over, with no result till the surface of the ground was reached, when it was found that the bottom of the cairn was paved with large boulders, below which, about the centre, and several yards around, were many traces of burning,—charred wood, and black stuff which had penetrated the yellow subsoil as if in streams. On turning over the stones a circular disc of stone with a hole in the centre was found, as also a small boulder with a cup on its flat face.

The ground around the Grey Cairn is studded with cairns to the east and south, and with groups of hut circles to the west. The latter often occur in groups of two together, in size from 28 to 30 feet in diameter, the walls from 2 to 3 feet thick, being defined by concentric lines of large boulders set on end. The entrances are to the south, going through the walls, and are defined by flags on end.

A hut circle on the south-west of the Grey Cairn was dug into around the entrance, in the belief that in this situation articles would probably have been thrown out, but with no result. In the centre, charred wood and minute fragments of bones were found.

Two hut circles on the west of the Grey Cairn were thoroughly trenched, without result, except the appearance of charred wood, and on the west side a fragment of bronze like the pin of a brooch.

A hut circle in the corner of the improved ground on the north of the cairn was examined, and much charred wood was found in the floor. It was one of two which were probably enclosed by a wall, as at Persie; but the neighbouring one had been removed when the field was improved. A hut circle on the north-west of the big cairn was trenched all round the walls, which were removed, with no result; but many flags were found on the floor.

The cairns were of varied plan; but none of them were conical, the whole being flat in shape. On the south-east of the large cairn was one about 9 yards across, defined by large boulders, with a raised ridge around, and a cup in the centre. The raised ridges and centre were all formed of small stones and earth. A trench was cut through it from the south-east, which showed that in the centre, at a depth of 2 feet, a deposit had been made, of which the remains were charred wood and fragments of charred bone, with traces of blackish matter, which had filtered into

the yellow subsoil, as in the case of the graves at Hartlaw.¹ Many fragments of white quartz pebbles appeared near the centre, as in other cairns to the east.

North-east of the big cairn among the small cairns is a circular structure of about 18 feet across. It was defined by an external circle of large stones; an inner wall of large blocks went round at about 6 feet inwards from the outer one. A trench from the north-east towards the centre showed a rude pavement, several large flattish flags, and great quantities of white quartz pebbles. One small cairn north-east and near the large cairn, on being trenched through, showed no result.

Farther to the north-east, among the small cairns, is a circle of stone pillars, many of them now prostrate. It consists of nine pillars or boulders in a circle of about 8 yards in diameter. A trench across it showed, towards the centre, fragments of charred wood in the subsoil, and also towards the south margin burned bones, and charred wood in the subsoil; and always where this occurs the subsoil is blackened around for a bit, as if saturated with some liquid. Many of the small cairns around this were examined, and nothing was found.

Farther north on the moor are two hut foundations of the usual size and construction, with entrances. Near them a round cairn about 20 feet across, and many smaller ones around. The large one was dug into, and charred wood appeared. In the centre was a pit filled with calcined bones and charred wood. This cairn almost abutted on the outside wall of one of the hut circles.

One of the hut circles north of the large cairn had a flagstone in the centre. A small space enclosed by stones near to it was found to be filled with about 2 feet of black unctuous earth.

Among the cairns east of the Grey Cairn is one about 30 feet in diameter, defined by large boulders, and slightly raised in the centre. A trench made from the west through the centre showed a central cist lying south-east and north-west, measuring 3 feet 8 inches in length, formed of great flags. The covering flag had been removed before, and the cist was filled with rubbish. It had no slab in the bottom, and the earth in it was rich and unctuous. Many small cairns were around it.

The deposits in some of the hut circles of charred wood and fragments

¹ Proceedings, vol. vi. p. 55.

of burned bones were so much the same as those in the cairns, as to suggest that burials may have taken place in them after they were disused for houses.

On crossing over the moor northwards about a mile from Balnabroch, to a point on Dalrullion where a view is opened up the Blackwater towards Mountblair and Glenshee, is another group of stone circles. They are concentric, and are defined by boulders or slabs, set in rows about 14 feet from each other, leaving a central space of from 25 to 30 feet within. The entrance of about a yard in width is always on the south-east, and is defined by slabs set in the earth. On each side of the entrance the space between the rows of stones is filled up with a heap of small stones like a cairn.

Some of them occur in twos together. There is also a very small circle of about 12 feet across, with a central space of about 8 feet, and circular walls, defined, as in the other cases, by boulders in the earth. Here the entrance was probably to the north, as the other side is sheltered by a projecting knob of rock.

The large boulder resting on a mass of rock, which has been termed a Rocking stone, is in the neighbourhood of the hut circles, and the hill-side is covered with boulders and rocky projections.

On the ridge of moor at West Persie, about a mile to the south-east of Balnabroch, is another group of circles. This group had been enclosed by a protecting wall, of which the line in front on the west side remains.

In two cases another wall ran from this external boundary, and enclosed two of the hut circles. The huts, measuring 21 to 27 feet in diameter, are defined by large slabs in the earth, with entrances on the south. At the entrances were found paving flags in the ground, and in the centre of some were found traces of rude pavement. At the door of one, fragments of charred wood and burned bones were found, and the same in the centre of an adjoining one, where a large boulder with a hollow, as if for grinding, was also found.

In the floor of one of the huts of the enclosed groups were found seven holes surrounded by stones, leaving an empty space in the centre sufficiently large to contain a good stout post. A similar small hole was in the centre of the circle. On the north side of this hut were several sharpening stones, and round balls of quartz were found in different places

on the west side, also large fragments of charred wood. The adjoining circle was paved in the doorway and inwards for a little way. Some of the circles here had only a single wall.

On the slope to the west are some small cairns of stones, but they and the surrounding walls have been dilapidated for the sake of building materials. It is probable that the walls and hut circles were continued to the north, but if so, planting and cultivation have obliterated all traces of them.

The remains now described seem to be those of early British settlements. They occur partly on lofty exposed moorlands, and partly in sheltered hollows. I heard of several similar groups in the same neighbourhood on the high grounds and in their glens.

Most of the sites selected were on exposed platforms, but there they were probably the only grounds cleared of wood, and their elevation enabled their occupants to keep watch over the surrounding districts. They were dry, and had an abundant supply of water in the neighbourhood.

The mixture of cairns and hut circles seems to indicate a practice of burying the dead in the midst of the abodes of the living. Of this mixture there are other similar instances on upland moors on the skirts of the Mounth. I have examined a line of groups of cairns and pillars on the Torrocks, near the kirk of Lintrathen, extending in length about a mile and a half, and half a mile in breadth. Many of the cairns here are about 15 feet across, although some are about twice that size. They are almost flat, the stones being laid close together, packed like pavement, and surrounded by an outside line of boulders. Some of them have been opened, without any trace of deposit; others show in the centre remains of burned wood and unctuous earth.

If this is not a mixture of hut circles and cairns, as at Balnabroch, it must have been a cemetery of great importance, evidencing a change of custom from that which prevailed when the dead were buried in isolated cairns and cists.

A careful examination of these cairns, and of the other groups to which I have referred, is greatly to be desired.

The thickness of wall in some of the circles on Dalrullion is remarkable. It seems probable that the space between the two rings of boulders

was filled up with stones and earth to a certain height, and that on this wall the roof of hurdle-work and branches rested. The walls of houses in Tiree and other islands of the Hebrides are even in our own day constructed on the same plan, and to attain the same end. Two walls are erected at a distance of six to eight feet apart, the space between being filled up with sand or turf, and the roof is perched on the top on the inner side, leaving the flat top of the broad wall outside.

The country people in Strathardle have no knowledge of the Druidical character ascribed to these circles.

They believe that they were houses, and that in the space between, the cattle were sheltered.

The Rev. Mr Allan Stewart, who applied the Druidical theory to the circles and "Rocking" Stone, is inclined also to believe that we may have to thank the Druids for giving the name to Glenshee. He finds out that they had a practice of holding assizes in the most convenient part of the country, and that the officers who performed this duty were called *Sithichean*, or peacemakers. A round hill in the head of the glen, called *Sith-dhun*, the hill of peace, may have been, he says, one of the places for holding these courts of justice, and hence the whole glen may have got its name. To those who stumble at this suggestion, my namesake offers another, that *Sith-dhun* may have been the place of concluding and ratifying a peace between two contending tribes or clans.¹

On the subject of the Rocking Stones I may remark, that while it is far from unlikely that in occasional cases, large boulders, deposited by glacial agency, may lie in such a way as to permit of their motion, yet in most cases, when their history is investigated, it turns out that they have for some time ceased to rock, and a wicked mason or idle shepherd is introduced into the narrative, who is known to have chipped off a corner, and so ruined the motive powers of the stones.

¹ Statistical Account of Scotland, vol. xv. p. 507.

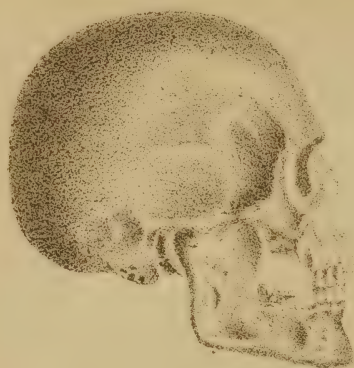


Fig. V. Skull from West end of Cist A at F.



Covering Stone of South grave of upper tier (H).

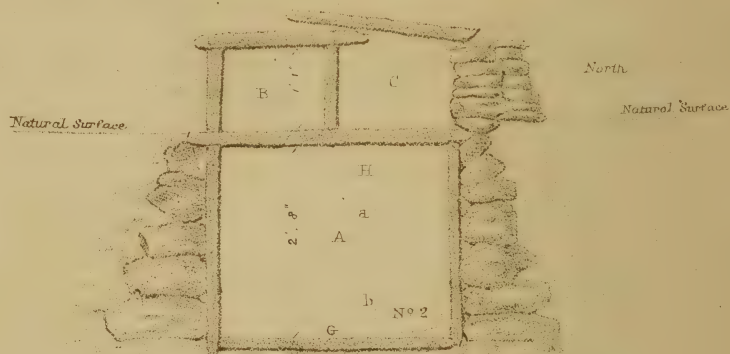


Fig. I.
Transverse Section of the Newbigging Cists



Fig. II.
Ground plan of lower Cist (A)

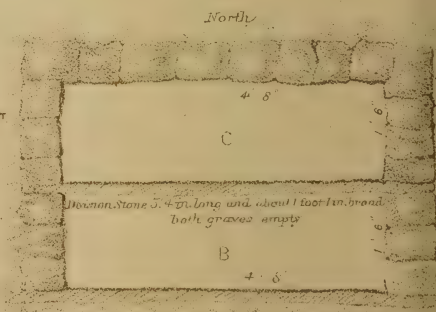


Fig. III.
Plan of upper tier of graves

II.

NOTICE OF A BARROW CONTAINING CISTS, ON THE FARM OF NEW-BIGGING, NEAR KIRKWALL; AND AT ISBISTER, IN THE PARISH OF RENDALL, ORKNEY. BY GEORGE PETRIE, ESQ., KIRKWALL, F.R.S.N.A., CORR. MEM. S.A. SCOT., &C. (PLATE XXIV.)

In May 1855, Mr William Fotheringham, the proprietor of the farm of Newbigging, near Kirkwall, informed me that he had accidentally discovered on his farm a cist containing a small stone urn, which, having an unpleasant smell, was left exposed in the open air, and was smashed by some boys. When found, the urn had a quantity of fragments of burnt bones and ashes in it. It was of an oval shape—its greatest diameter at the mouth about 9 inches, and its depth the same. It was narrower at the bottom, which was flat, and perforated by three or four small holes. The fragments of the urn are in my possession.

Having observed some barrows near the spot where the urn was found, and knowing also that another cist containing a human skeleton had been discovered in the same neighbourhood some years previously, I requested the farmer to open some of the barrows, and, if he came to a *cist*, to send me notice. A few days afterwards I was informed that some graves had been found, and I lost no time in revisiting the place.

The barrow about to be described was situated on the south-eastern declivity of the hill, which forms the west side of the valley between the bays of Kirkwall and Scapa, and commanded a view of both bays. It was about 30 feet in diameter at the base, and 5 to 6 feet high. It was a bowl-shaped barrow, chiefly composed of clay, and contained three cists arranged as shown in section fig. 1, Plate XXIV.

On clearing away the clay from the centre of the upper part of the barrow a heap of stones appeared in view, which was also removed. Beneath the heap were two large flagstones—one nearly 7 feet long, slightly overlapping the other, which was a shorter but much heavier stone. The latter had a piece chipped out of the middle of each end (see sketch D), apparently for the purpose of more convenient handling. On raising the flagstones two cists were found beneath them, each about

4 feet 8 inches long, 1 foot 6 inches wide, and about 13 inches deep. The cists lay about east and west by compass, and were separated by a flagstone placed between them, about 5 feet 4 inches long, having its ends extending into the building at each end (see fig. 3). A flagstone, 6 feet 6 inches long, formed the south side of the south cist, but the north side of the other cist, and the ends of both, were formed by stones rudely built in the shape of a wall, while a large flagstone served as a mutual bottom to both cists. They were entirely empty, and showed no trace of ever having been occupied. On their removal it was discovered that they had been constructed on the top of another cist, whose covering-stone—the large flagstone just referred to—had thus been made to do double service, as bottom to the upper cists and cover to the lower one. The latter cist measured 4 feet 8 inches in length, 3 feet 1 inch in width, and 2 feet 2 inches deep, and was formed by four large flagstones set on edge for the sides and ends, and a fifth for the bottom. Two human skeletons lay in this cist—one at each end—in a flexed or contracted posture.

The largest skeleton (marked 1) lay on its *right side*—its head about the centre of, and close to, the west end of the cist. The right hand appeared to have been placed under the right cheek, and the left hand within the fold of the right arm, clasping it just above the elbow. The back of the skeleton lay close to the north side, and the knees were drawn up in front of the breast, so that the heels almost touched the thigh bones. In short, the body was completely doubled up, so as to occupy as small a space as possible in the cist. The other skeleton (No. 2) was at the east end, lay on its left side, and apparently had also been deposited in the cist in the flexed posture, for the thigh and leg bones lay across the body, and one, at least, of the hands appeared to have rested on the breast. The whole of this skeleton was so much decomposed that its outline could with difficulty be traced; but the skull was tolerably perfect, although so friable that it could not bear removal. The skeleton was so huddled together that it readily conveyed the impression either of having been previously interred and afterwards reburied in the cist, or of having been dismembered *before* interment, that it might occupy no more space than the corner allotted to it. Its thigh and leg bones lay *above* and *across* those of the other skeleton, showing that the *latter* had been *first* placed in the cist.

A quantity of ashes, intermingled with small fragments of calcined bones, lay in a small heap in the space marked C on the ground plan fig. 2; and some of the bones of the skeleton No. 2 lay on the heap of ashes, which had therefore in all probability been placed in the cist *before* the skeleton No. 2 was laid in it. It is interesting thus to find traces of burning *within* a cist in which skeletons were found. Possibly the ashes may not have been those of a human body; but I am strongly inclined to think they were, as in numerous instances of cremation in which I carefully examined the bones and ashes, I found undoubted fragments of human skulls generally adhering to, or embedded in, the vitrified substance ("cramp"), which is almost invariably in Orkney found in the graves or barrows in which cremation can be traced.

The skull belonging to the skeleton No. 1, which lay at the west end (F) of the cist (see Plate XXIV. fig. 2), was sent by me to Dr J. Barnard Davis, by whom it has been described in the "*Crania Britannica*." (See description, and plate iii.) The following is a copy of the description sent to me by Dr Davis, after he had carefully examined the skull:—

"The cranial relic recovered from this cist, probably the most distinctive and faithful representative of an ancient Orcadian known, may be regarded as the capacious skull of a man of more than sixty years of age. Its facial aspect is that of the ancient Briton, in all those features we have so frequently described as characteristic of the race. It is large in every direction. The forehead, of medium height and expansion, is balanced by a deep and wide occipital region. A perpendicular line, rising through the centre of the auditory orifice, divides the *receptaculum cerebri* into two halves of very nearly equal length, but of greatly unequal capacity. The mass of brain in the hind-half would much exceed that in the fore-half, probably not far from double it. This short but capacious hind-head gives the skull a brachycephalic form, which is typical. Regarding the cranium from behind there is an obvious irregularity in the sides of the occiput, the right bulging out more than the left. . . .

"We may regard our Newbigging specimen as a noble representative of the ancient Orcadian race. In point of size, as is marked by its hold-

ing $83\frac{1}{4}$ ounces of sand, it is above the average. Its stern facial features receive force from this capacious calvarium, but doubtless would also derive from it a modification of power likewise, mental and moral. The evenness and equal bulging out of the calvarium at all points impart a mildness to the skull which is at variance with the angularity and wildness witnessed in some skulls of other races. That this appertained to a man of consequence in his tribe is very probable, from the mode of interment in a cist so carefully built, and encompassed by a barrow of such magnitude.

“ MEASUREMENTS.

| | Inches. | | Inches. |
|-----------------------------|---------|--|---------|
| “ Horizontal circumference, | 21·0 | Occipital region—Length, | 4·9 |
| Longitudinal diameter, | 7·1 | Breadth, | 5·3 |
| Frontal region—Length, | 5·0 | Height, | 4·2 |
| Breadth, | 5·1 | Intermastoid arch, | 15·6 |
| Height, | 4·9 | Internal capacity— $83\frac{1}{4}$ ounces. | |
| Parietal region—Length, | 5·5 | Face—Length, | 5·0 |
| Breadth, | 5·7 | Breadth, | 5·4.” |
| Height, | 5·1 | | |

A tracing of the skull, from a sketch sent to me by Dr Davis, accompanies this paper. (See Plate XXIV. fig. 4.)

The skeleton No. 2 was shorter, and more squat in form than No. 1. The skull was also of a lower type, more square in its outline than No. 1, and remarkably thick. I was only enabled to send a few of its fragments, chiefly of the lower jaw, and some teeth and two metatarsal bones, to Dr Davis, who wrote me that “the robust appearance of these parts, and the worn state of the teeth, render it probable that they belonged to a man who had passed the middle period of life.”

In 1858 I received notice from Mr James Muir, the intelligent tenant of the farm and mill of Isbister, in the parish of Rendall, that a group of ancient graves had been accidentally discovered close to his house. I visited the place as soon as possible, and found that the largest cist was unmolested, the lid, which had been merely started, having been replaced till my arrival. The turf having at my request been removed from the covering stone, the latter was then carefully lifted, and a cist exposed to view 5 feet 8 inches long on the south-west side, 4 feet

8 inches long on the north-east side, and 2 feet 3 inches wide. The depth was 2 feet 10 inches at the longest side, and only 2 feet 7 inches on the other or shorter. This gave the cover a considerable inclination towards one side, apparently to throw off the water which might reach the cover from the surface of the ground. As a further means to prevent water lodging in the grave, the bottom was covered to the depth of about an inch with gravel. It is a very common occurrence in Orkney cists to find a quantity of gravel both within and around the graves; and the Rendall cist was not the only instance of the cover of the cist having been placed with a slope or inclination, with a view to throw off any water that might penetrate to it from above. In fact, the greatest care seems sometimes to have been taken to have the cists kept as dry as possible, and I have on more than one occasion, where a barrow contained three or more cists in a group, found a small drain leading from the centre of the group to the outer edge of the barrow. The long passage in Maes-how probably was used as a doorway or entrance, but I have little or no doubt that its main object originally was to serve as a drain to carry off any water which might get into the interior of the structure, for the outer extremity of the passage was of so limited dimensions that no human being could have got through it.

But to return to the cist at Isbister. At the north-west end of the cist a human skeleton lay on its right side in the flexed posture. The right hand had apparently been placed under the right cheek, and the left arm crossed the breast, and the left hand rested on the right arm. The knees were so far drawn up that the thigh bones touched the right elbow, while the feet were well up under the thigh bones. The skull preserved its form when discovered, but shortly afterwards fell to pieces.

At the opposite or south-east end of the cist, another human skeleton lay in a similar posture on its *left* side, with the skull close to the end of the cist. The head was bent forward as if in a stooping posture. The mouth was wide open, and the arm, thigh, and leg bones lay huddled together, across and above the leg bones of the other skeleton, which had evidently been *first placed* in the cist. The knees were within a few inches of the chin. The whole appearance of the skeleton last described could only be accounted for on the supposition that it had either been dismembered, or had been horribly crushed into a mangled heap

before interment. While great care had evidently been taken in placing the lower body in the cist, it was equally apparent that the upper or last deposited body had been subjected to very rough treatment. There was a very marked difference between the two skulls found in this grave, just as there was between those found at Newbigging. That which lay at the north-west end of the Isbister cist was of a much longer form than the skull of the skeleton which lay huddled together at the opposite end. The latter was not only very thick and heavy, but very short from the front to the back—of a triangular shape—very low in the forehead, with deep massive jaw-bones and projecting chin, and was altogether a low type of a human skull. It was, however, in excellent preservation, and apparently belonged to a man of about fifty years of age.

It was not, however, only at Newbigging and Isbister that I have observed short squat skeletons. I have met with the same peculiarity in other graves. The bones were generally so wasted that they crumbled down when exposed to the atmosphere, but I was always able to examine them sufficiently to ascertain that while the upper part of the frame was broad and massive, the thigh and leg bones were not of corresponding size. Could anything in their habits or mode of life account for this peculiarity? They evidently were more accustomed to use their arms than their legs. Possibly they spent much of their time fishing in canoes, where the arms and chest would have almost all the exercise.

So nearly alike are the internal arrangements of the cists of Newbigging and Isbister (with the exception of the heap of ashes), that the plan of the one might serve for the other. In each case the lower skeleton was longer, the skull also of a longer shape, and the bone much thinner than in the case of the upper skeleton. It was only, however, when seen in their original position as first discovered that the difference could be fully seen and appreciated. No one, looking down into either of these open graves, could for a moment believe that the same affection and care had been manifested in consigning the upper body to the tomb as had been bestowed on the lower.

Situated in a south-west direction, and about 5 feet distant from the Isbister cist above described, another was found. It was 3 feet long, 1 foot 10 inches wide, and 3 feet deep, and contained remains of the

skeleton of a woman about sixty years of age. The skull, *minus* the lower jaw-bone, lay at the east-south-east end; a few bones near the centre, and a heap of *burnt bones* within a foot of the other end of the cist. A double tooth or grinder much burnt, but perfect in form, was found amongst the burnt bones, and on the top of them lay portions of the bones of the arms and legs. The skull had been taken out, and returned to the cist before I saw it, but I was informed by the young man who first found it, that it was then *lying on its face*. The covering stone of this cist slanted in the same way as the other.

Another cist, about 18 inches square, was afterwards discovered about 5 or 6 feet from the south-east end of the two cists just described, but it only contained a quantity of fragments of burnt bones lying in a heap in the centre of the cist.

The group I have just described was a very interesting one. There was the principal cist with its two occupants, the one evidently of inferior rank to the other; and, at a short distance, another cist containing the remains of a female, whose body had apparently, *in a sitting posture*, been partially consumed by fire; and, about equidistant from these two cists, a third cist, containing burnt bones alone. Looking at the entire group, I am led to hazard a conjecture that the skeleton with the long-shaped skull in the largest cist was that of a chief or warrior; that the skeleton at his feet belonged to a captive or favourite slave, who had been slain and interred along with his master; and that the heap of burned bones in the smaller cist was the remains of other servants or slaves also slain on the occasion, that they might accompany and serve their master in the spirit land. The other cist, with the partially calcined remains of a female, appeared to indicate the existence of a suttee system, which had induced or compelled the widow of the deceased chief or warrior to perish amid the flames.

The similarity between the groups of Newbigging and Isbister is very remarkable and suggestive. The principal cist in each case contained two skeletons, presenting the same distinctive characteristics of the crania, and the same peculiar postures and relative positions of the skeletons. The heap of burnt bones lay, however, at Newbigging in the same cist with the skeletons, while at Isbister they were found in a separate cist. It is not improbable that the skeleton said to have been

found at Newbigging, sometime previous to the discovery of the barrow which I have described, may have belonged to a female, but that, of course, it was impossible then to ascertain, as the whole had been covered up again, and could not be pointed out. There was no barrow visible at Rendall. The ground had been disturbed all around, and a great deal of earth had been removed, but I thought I could still trace the outline of a barrow of large size around the largest cist.

Dr Davis gives it as his opinion that the skull of the lower or most highly developed skeleton at Newbigging resembled that of an ancient Briton. Then to what race did the slave or captive which lay beside him belong? Have we in these squat skeletons, with skulls of great thickness, recovered traces of an aboriginal race of colonists akin to the Fins, Laps, or Esquimaux, whose snow-houses the so-called Picts-houses so closely resemble in form and structure, making due allowance for the difference in material? Such questions are more easily put than answered, but they may be solved at some future period. The discovery and careful examination of a few more of the interesting class of graves to which those of Newbigging and Isbister belong would probably throw some light on the subject.

III.

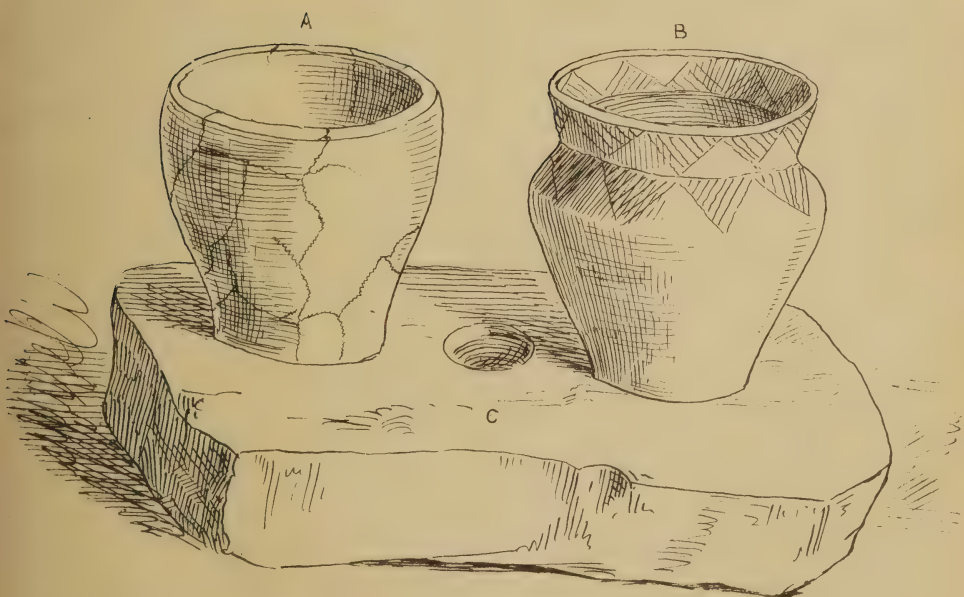
NOTICE OF THE DISCOVERY OF CISTS CONTAINING URNS AND
BURNED BONES AT TORRAN DUBH, NEAR TAIN. BY THE REV.
JAMES JOASS, CORR. MEM. S.A. SCOT. COMMUNICATED BY JOHN STUART,
ESQ., SEC. S.A. SCOT. (PLATE XXV.)

A few evenings ago, W. P. Duff, Esq., Eddertoun House, discovered under a slab, which had been disturbed by one of his ploughs, the upper part of a small and very rude clay urn (see Plate XXV. A). The covering slab being carefully raised next morning, a small cist was found, 22 inches long, 15 inches broad, and 1 foot deep. In one corner, in a small heap of reddish earth, and under a bit of rolled granite which had probably fallen into the mouth of the urn, its bottom was found, broken in pieces. This cist occurred on the southward slope of a gravelly knoll, named *Torran Dubh*, about 200 yards to the left of the public road near the fifth milestone from Tain. On digging at the top of the Torran a pile of large



TORRAN-DUBH

Eddertoun.



drift stones was discovered, widening downwards, and passing into small flags laid horizontally, the whole resting at a depth of 3 feet upon two large sandstone slabs.

These were found to cover a cist 4 feet 6 inches long, 33 inches wide at one end and 24 at the other, and 26 inches deep, formed of four large undressed slabs resting upon the undisturbed gravel. It was filled with gravel and sand, which, when carefully excavated and passed through two riddles, yielded several small fragments of burnt bone, part of two human teeth, pieces of charcoal, and a broken bronze pin much oxidised.

The urn was found 12 feet due south, and at the same distance west; in the corner of a very small cist, close to the surface, a second urn was found (B), also mouth upwards. It was of the same height as the first, $5\frac{1}{2}$ inches, and filled with fine reddish earth. This urn was of better form and finish, being much harder baked, and of rather more elegant design. It was also ornamented on the lip inside and out, and on the shoulder, with an incised chevron pattern. On the top of a neighbouring knoll lay many stones and small slabs of sandstone, blackened by fire. One of these (C) had on one side a single cup roughly picked out.

MONDAY, 14th May 1866.

The Hon. LORD NEAVES, Vice-President, in the Chair.

The following Gentlemen were balloted for, and elected Fellows of the Society:—

ROBERT YOUNG, Esq., Writer, Elgin.

JAMES AULD, LL.D., St Andrews.

The Donations to the Museum and Library were as follows, and thanks were voted to the Donors:—

(1.) By Mrs JOHN CAIRNS, Henderson Row.

Celt of Fine-grained Sandstone, measuring 5 inches in length and 4 inches across the face. It has a groove or contraction at the narrow extremity, where it has unfortunately been broken.

Square-shaped Stone or Stone Cup, measuring $3\frac{1}{2}$ inches in length, 3

inches in breadth, and $1\frac{1}{2}$ inch in thickness, with a deeply cut oval cavity or cup on its upper surface. The cup contains a reddish-coloured powder.

Celt of a Bluish-coloured Stone, measuring 3 inches in length, and 2 inches across the face, much worn.

Two Stone "Knives" of fine-grained micaceous sandstone, apparently formed by splitting rolled pebbles longitudinally, so as to give a sharp edge on one side.

Portions of large Urns, varying from $\frac{1}{2}$ inch to 1 inch in thickness, of coarse reddish clay, mixed with gravel.

Flat fragments of Reddish Clay, measuring 4 inches in length by 2 inches in breadth, and displaying a raised chevron pattern.

Two Bone "Hammer-heads," consisting of a portion of the leg-bone of an ox, cut into a bevelled and polished extremity, with a perforation for a handle, behind the articular surface of the joint. One measures 5 inches in length, the other $5\frac{1}{2}$ inches in length.

Bones of a large Bird, of the Ox, &c.

Two portions of the shaft of a Bone, transversely cut, so as to form rings or buttons. The one measures $\frac{3}{4}$ of an inch in length, the other $\frac{1}{2}$ inch in length.

Eight Pins or Piercers of Bone, the head generally formed by part of the articular surface of the bone. They measure from $2\frac{1}{2}$ inches to $4\frac{1}{2}$ inches in length.

These various articles were found in excavating an underground chamber at Skerrabrae, Bay of Skaill, Orkney.

(2.) By JOHN CAIRNS, Esq., Artist, Henderson Row.

Sketch in Oil of the interior of the Chamber at Skerrabrae, 19 inches by 24 inches, taken in October 1863, and also sketches of various articles of stone and bone found therein.

(3.) By ANDREW JERVISE, Esq., Corr. Mem. S.A. Scot.

Arrow-head of reddish-coloured Flint, measuring $1\frac{1}{2}$ inch in length, with barbs and stem. Found on the Red Hill, parish of New Deer, Aberdeenshire.

Hardhead, or copper Twopenny piece of King James VI. Mark of King Charles II.

(4.) By HENRY C. MACLAURIN, Esq., F.S.A. Scot.

Lecythus or Cruet, the mouth-piece awanting, with handle, of red earthenware, 6 inches in height, and 2 inches in diameter at the upper part. It is ornamented with a belt of black below, and shows remains of honeysuckle and other patterns above. It was found at Halicarnassus.

Black Earthenware Lamp, of circular shape, with projecting nozzle for wick, with a small projecting triangular-shaped ear at each side. It measures $2\frac{1}{2}$ inches in diameter, and is ornamented by a pattern in relief. It was found at Pompeii.

Finger-Ring, silver gilt, with an oval disk, on which is inscribed I·H·S., probably Italian work.

(5.) By MRS ALEXANDER MORISON, of Bognie.

Thirteen pieces of Copper Money, generally in bad preservation, including three bawbees and a bodle of Charles II., halfpenny of William III., and others about the same size, but quite defaced. They were found in clearing out the old chapel well at Montblair Castle, parish of Alvah, Banffshire.

(6.) By FRANCIS R. N. ROGER, Esq., The College, Marlborough.

Three Scottish Church Communion Tokens, in lead. One, $\frac{5}{8}$ of an inch square, has on one side DARSY 1708, and on the other M·W·K. Another measures $\frac{3}{4}$ of an inch square, has on one side, within a circle, the armorial bearings of Glasgow, which is round, "GLASGOW, 1725." The third measures $\frac{7}{8}$ of an inch square with the corners cut off. One side displays a church with a small belfrey; on the other is M^r A·M· 1767.

(7.) By GEORGE BELL, Esq., M.D.

Small Laurated Male Head, sculptured in white marble, 5 inches in length. The neck is rounded off below, and has a perforation as if for fixing it by a peg to a base. The head apparently resembles that of the Roman Emperor Galba.

(8.) By Mr GEORGE RANKINE, optician.

Pair of Barnacles or Spectacles, without sides or handles, in leather frame, with a pasteboard case.

Pair of curious Spectacles in bronze frame, with large circular eyes,

and hinge at end of the bridge. A small hinged pin, with a flattened disk at its extremity, springs backwards from the bridge, apparently to rest on the forehead. The outer edge of each eye-frame is pierced with two holes, through which passes a loop of silk cord, these, when in use, were passed over the ears. From Japan.

The right eye is fitted with a lens of rock crystal, which has only two inches of negative focus, and apparently had been made for a case of extreme myopia. The wearer was probably also blind of the left eye, as the frame on that side is fitted up simply with plain glass.

(9.) By the Rev. JOHN MILN, Schoolhouse, King Edward, Aberdeenshire.

Silver Coin of King Charles IX. of Sweden, found near the parish church of King Edward, Aberdeenshire.

(10.) By JAMES MACNAB, Esq., 9 St Andrew Square.

Commission from King William and Queen Mary appointing Charles Boyd, gent., to be an ensign in the company of Foot commanded by Sir Charles Grahame, whereof Lieutenant-Colonel Somerville is captain, dated 1st Aug^t 1693. The commission is on vellum, and bears the signature of King William III. and a wafer impression of the Privy seal.

(11.) By ROBERT COX, Esq., F.S.A. Scot. (the Author).

The Literature of the Sabbath Question. 2 vols. 8vo. Edinburgh, 1865.

(12.) By the SENATUS of the UNIVERSITY.

The St Andrews University Calendar for the year 1865-66. 12mo. Edinb. 1865.

(13.) By J. BARNARD DAVIS, Esq., M.D. (the Author).

Notice of the opening of a Barrow at East Scalehouse, in the West Riding of Yorkshire, and a comparison of that barrow with certain others in Jutland. 8vo. (Pp. 14.) London, 1865.

(14.) By DAVID LAING, Esq., LL.D., V.P.S.A. Scot. (the Editor).

The Poems of William Dunbar, now first collected; with Notes, and a Memoir of his Life. 2 vols., with Supplement, 8vo. Edinburgh, 1834-1865.

The Poems and Fables of Robert Henryson, now first collected; with Notes and a Memoir of his Life. 8vo. Edinburgh, 1865.

The following Communications were read :—

I.

NOTES OF THE EXCAVATION OF TWO SHELL-MOUNDS ON THE
EASTERN COAST OF ABERDEENSHIRE. BY CHARLES E. DALRYMPLE,
ESQ., F.S.A. SCOT. COMMUNICATED BY JOHN STUART, ESQ., SEC. S.A. SCOT.

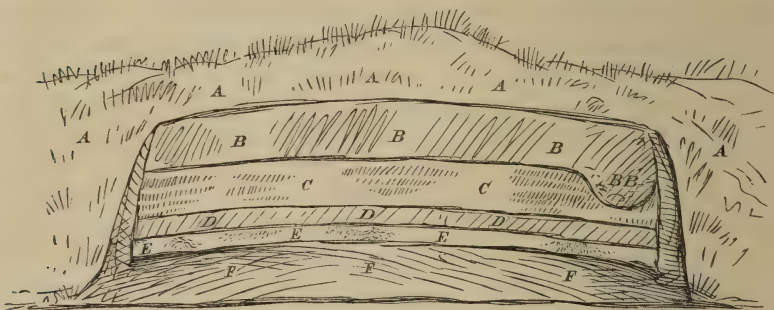
The district in which these remains are situated has some peculiar features which make it worthy of description. It is a peninsula, lying between the sea and the river Ythan, which stream, for the last three miles of its course, flows to the south-eastward, its general direction, previously, having been about east. The peninsula may be roughly described as an equilateral triangle, about $3\frac{1}{2}$ miles each way, covered for the greater part with low hummocks of sand, clothed with bent grass, but which, towards the southern extremity, attain almost the size of hills, and are totally devoid of vegetation. Standing among the long swelling slopes of pure hard sand, with a hot August sun overhead, one is struck by the strangeness of the scene, and its likeness to the deserts of hot countries, rather than a portion of a Scottish county, within a few miles of some of the most noted stock-farms in Great Britain.

That part of the course of the Ythan which skirts this peninsula of Forvie (that being its name) forms at high tide an estuary, called the "Sleek," probably derived from the Gaelic "sliach," mud, as at low water it is reduced to a dreary expanse of mud banks, through which the little river steals slowly to the sea. Along both shores of this estuary, at different distances from the water, lie many shell-mounds, some of considerable extent; but those described in the following notes lie on the eastern side, opposite to the little port of Newburgh.

The present writer was first made acquainted with their existence by Mr Thomas Jamieson, factor on the estate of Ellon, a gentleman well-known to our leading geologists, taking himself an honourable place in their ranks. Mr Jamieson had satisfied himself by a partial examination of the nature of these mounds, and willingly joined in the fuller investigation which the writer decided on making, and in which they had the

valuable aid of the Rev. Samuel W. King, Rector of Saxlingham, Norfolk, an able geologist and antiquarian.

The first mound examined lies along the bank of the Ythan, close to high-water mark, and looks like one of the numberless sand hummocks which have been described, covered with bent grass. On close examination, however, numbers of shells are seen to be mixed with the sand and the roots of the grass, which feature first drew Mr Jamieson's attention to the peculiar nature of some of these mounds. Its length is about 150 feet, by 30 in width; height from 15 to 16 feet. An excavation was made in the side facing the river, showing a perpendicular section of the mound, and laying open the whole strata, which were alternately of pure sand and of deposits of the shells of the cockle, muscle, and winkle, all of which had been exposed to the action of fire, having evidently been cooked,—the site of at least one fire-place having been plainly discovered. The accompanying sketch, No. 1, of the



No. 1. Section of Shell-Mound at Forvie.

section made in the mound will show the position of the strata and their vertical measurements:—

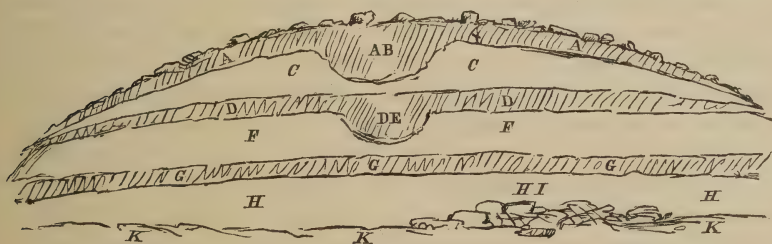
- A. Sand, clothed with bents, 4 feet.
- B. Burnt shells, 5 feet; BB, fire-place, containing burnt stones, charcoal, shells, &c.
- C. Alternate very thin strata of sand and burnt shells, 5 feet in all.
- D. Sand mixed with a little charcoal and burnt matter, 1 foot.

E. Pure blown sand, 1 foot.

F. Old beach, surface 3 feet above present high-water mark.

No weapons, implements, or remains of any kind whatever were found in this mound, excepting what have been mentioned.

The other mound examined was distant about a mile from the first, lower down the river, and lying further from the bank, at a spot where the peninsula is lower than anywhere either north or south of it, and about $\frac{1}{2}$ a mile from its southern extremity. The ground here is hard old beach, from 6 to 8 feet above the level of the sea, and with little sand on the level surface, although blown into heaps in the immediate neighbourhood. The surface of this mound was covered with shingle, but with many larger stones intermixed, and many shells, both of which evidently had been exposed to the action of fire, while most of the stones appeared as if they had been red hot at some time, being split and cracked as well as discoloured. On the bare ground, near the mound, are numberless flint chips to be found, as indeed is the case over a great part of the peninsula, where the ground has not been over-blown with sand. This mound was of an irregular horse-shoe form, about 90 yards



No. 2. Longitudinal Section of Shell-Mound at Forvie.

in length, but only from 8 to 10 yards broad, and not rising more than from 5 to 6 feet above the original surface of the ground. A section having been cut across the east end of the mound, the strata appeared as shown in sketch of mound No. 2:—

A. Shells from 1 foot, decreasing in places to a few inches of thickness; here and there a little sand over all. In the crest of the mound, at the spot *AB*, was a hollow or pocket going down into the next

stratum, which was sand, and was evidently a fire-place similar to that discovered in mound No. 1. It contained burnt stones, which had formed the hearth, bones and teeth of deer, and of a small species of ox, also shells and charcoal.

C. Pure sand, 1 foot.

D. Shells, 1 foot; *DE*, a fire-place similar to that in the upper stratum, containing the same substances, with the exception of the *bones*.

F. Blown sand, 16 inches.

G. Shells and charcoal, 2 inches only.

H. Blown sand, 16 inches, overlying the original beach. At *HI* the most interesting discovery of the day was made,—a hearth of stones marked with fire, which had been made on the original surface of the ground, which was beach *K*, and lying on and among which were bones of large animals, fragments of charcoal, and, among the bones, one which had been polished and sharpened as if for use, also a fragment of much corroded *iron* (which is exhibited). It must be mentioned that a rude stone celt (also exhibited), and which has apparently been subjected to the action of fire, was found *on the surface* of the mound, but, excepting these, no implements or other remains were found to indicate who or what the authors of these accumulations were. The conclusion, however, to those who witnessed the excavation, seemed indubitable that, at some very remote period, a fire had been made on the beach, where portions of certain large animals had been cooked and eaten—that later, though how much so it is impossible to say—but when 16 inches of sand had accumulated over these remains, the natives of the country had either encamped on the spot at different times, and lived on the shell-fish of the estuary, or that great “feasts of shells” had been successively held, with intervals between sufficient to allow of the accumulations of sand which exist between the strata of burnt matter. The discovery of *iron* in the lowest and earliest deposit of the whole, while a *stone* weapon lay among the latest, is also somewhat remarkable, although by no means conclusive of any very great antiquity in these remains, which may quite possibly have come there many centuries within the Christian era; but all must be in a great degree surmise, until further explorations in the shell-mounds of Scotland supply additional facts, on which alone any correct conclusion can be formed.

II.

NOTICE OF THE CHURCH OF ST CONGAN AT TURRIF, IN ABERDEENSHIRE, AND OF A FRESCO OF ST NINIAN DISCOVERED IN IT IN DECEMBER 1861. BY JOHN STUART, ESQ., SEC. S.A. SCOT. (PLATE XXVI.)

The ecclesiastical history of Turriff reaches back to a very remote period. The remarkable position occupied by the church, on the brow of a lofty bank, overlooking the valley through which the river Deveron sweeps close to its base, on its seaward course, seems to have pointed it out as a suitable site for one of those numerous monastic communities through which the knowledge of Christianity was imparted to the Celtic tribes of Pictland. The monastery of Turriff survived till the middle of the twelfth century. At that time we find Cormac, its abbot, witnessing a charter of King David I. in favour of the monks of the monastery of Deir, which had been planted in the same district of Buchan, by Saint Drostan. He is also a witness to a grant in favour of the same monastery of Deir, by Colban, the Mormaer of Buchan.

At a somewhat earlier period we discover another officer of the Celtic monastery of Turriff, when Demongart, its ferleiginn or lector, witnesses a grant by Gartnait Mac Cannech, Mormaer of Buchan, and Ete, daughter of Gillemichel, in favour of the monastery of Deir.

It is probable that the monastery of Turriff with its territory became secularised like many other of our Scotch monasteries. In the beginning of the thirteenth century, the church of Turriff was given to the monks of St Thomas at Arbroath, by Marjory Countess of Buchan; and in the year 1272 her son Alexander Cumyn, Earl of Buchan, by a charter dated at his castle of Kelly, in Buchan, and witnessed by King Alexander III., conveyed to an hospital which he had founded at Turriff all the right which he had to the church of Turriff. This hospital was for the maintenance of a master, with six chaplains, and of thirteen poor husbandmen of Buchan, and was dedicated in honour of St Congan. The chaplains were to perform service in the church of Turriff, and wear the habit of secular canons, living in common, and sleeping in one dormitory. From subsequent events, it appears that the master of the house was also the rector of Turriff, which might have been anticipated, as the church

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bishop and chapter in 1548. In the following year, Alexander Vaus, then prebendary, conveyed to Gilbert Hay of Delgaty, the lands of Cakeinche, part of the ecclesiastical lands, for payment of a yearly sum of ten merks, and on other conditions which are significant of the period. The said Gilbert was to defend and protect the prebendary in his rights; he was not injuriously to seize on the fruits of his lands, nor encroach on the church lands adjoining to those of Cakeinche.

Down to 1627 certain lands were held by the parson of Turriff as kirk lands; but in that year Mr Thomas Mitchell, parson of Turriff, with the sanction of the Bishop of Aberdeen, the Earl of Errol, and others, granted a charter of these lands to Francis Hay, son of Francis Earl of Errol, when they were finally secularised.

St Congan, in whose name the Hospital of Turriff was dedicated in 1272, is represented in the legendary history of the Scottish Church to have been the son of a chief in the province of Leinster in Ireland, and sister of St Kentigerna. He succeeded to his father's rule; but in consequence of some domestic tumults and bloodshed, he forsook his patrimony and country, and devoted himself to religion. Leaving Ireland, with his sister Kentigerna, and her sons St Felan, St Fursey, and St Ultan, with seven other clerics, he came to Lochalsh, in Northern Argyle, where he spent a solitary and ascetic life. On his death a church was built at that place in his honour by his nephew St Felan, and in the beginning of the sixteenth century the name of St Congan continued in reverence by the inhabitants of the district.

It is not now easy to suggest a reason for his selection as the patron saint of Turriff, unless we suppose that, like St Drostan, he was the founder there of one of those monasteries which seem to have been numerous throughout Alba. The dedications of the neighbouring parishes also connect them with members of that band of Irish missionaries who carried the light of the gospel into Pictland—the parish of Forglen, on the one side, being dedicated to St Adamnan, and that of Alvah, on the other, to St Columba. When Turriff was erected into a burgh of barony, it received the privilege of holding two public fairs, one of which was to be on the feast of St Congan; and after his memory had faded away in its religious aspect, it was preserved by this fair, which till lately was held annually on the 13th of October, being the

day observed as the festival of St Congan in the calendar of the Scottish Church.

The old church of St Congan was a long narrow structure, with no architectural features sufficient to fix its date. It measured 120 feet in length, by 18 feet in breadth.

In its eastern wall are built fragments of sculptured stones, which appear to have been portions of an older fabric. Some of these represent groups of heads looking upwards, as if a fragment of tympanum—probably of Norman character. In 1794 a new parish church was erected, and the only part of the old fabric now left is its eastern end, still known as “the quire,” and the belfry, in which is hung a fined-toned bell, dated in 1557.

Fortunately we have the means of ascertaining pretty closely the date of the choir, which otherwise, from the appearance which the remaining part of it presents, would have been doubtful.

In a volume of *Illustrations of the Antiquities of the Shires of Aberdeen and Banff*, prepared for the Spalding Club by Mr Joseph Robertson, he has printed the following notice from a manuscript pedigree of the House of Glamis in the possession of the Maitland Club:—“John [fourth] Lord Glamis succeeded his father [in the year 1497], who when he was master married [in the year 1487] Elizabeth Gray, daughter to the Lord Gray. . . . He had children, George and John, both Lords of Glamis, and Mr Alexander Lyon Chanter of Murray, who was a singular scholar in these times and was tutor to his brothers sons, and lyeth buried in the quire of Turreffe which he built; of whom being a churchman and unmarried came no lafull succession. He dyed in the year of God 1541.”¹

In December 1861 portions of the wall of the choir were removed as materials for improving the dilapidated dyke of the churchyard. A window in the south wall had been built up at some former period, and the workmen were engaged in removing the stones, when they discovered on the splay of one side a figure painted on the plaster in bright colours.

Several sketches were made, and a photograph was secured of the painting before the plaster was destroyed. One of the sketches was

¹ *Antiq. of the Shires of Aberdeen and Banff*, vol. ii. p. 338.

lithographed for the *Banffshire Journal*, where it appeared, along with an accurate notice of the circumstances of the discovery by the editor, who has done much to diffuse a taste for archæology in his own district.

My friend Mr Gibb of Aberdeen went to Turriff at my request, and made an accurate drawing of the fresco for me. From a copy of it, along with the photograph now exhibited, the character of the painting will be fully understood. (See Plate XXVI.)

It represents an episcopal figure, fully habited, with his pastoral staff in his left hand. His right hand is elevated in the act of benediction. The background is diapered in lozenge patterns. An inscription in Gothic letters, divided by the head of the figure, reads S. NINIANUS.

Another similar figure was on the opposite splay of the window, but was destroyed, and there is reason to believe that there was a series of like pictures all round the church. The fresco of St Ninian was broken up in the course of a few days after its discovery.

From what has been said, it would appear that we may regard the choir as a work of the first quarter of the sixteenth century, and we may therefore believe that fresco painting was in use for the decoration of the walls of our churches at that time.

An interesting passage in the history of the Abbots of Kinloss by Ferrerius, shows indeed that this style of painting was greatly prized throughout Scotland at the period in question. In describing the many good deeds of Abbot Robert Reid, he tells us that, in the year 1538, he engaged a painter, Andrew Bairhum, "celebrated indeed in his art, but withal contentious and difficult to manage." For three years Andrew was retained at Kinloss, during which time he painted three tables for adorning the chapels of the Magdalene, of John the Evangelist, and of St Thomas of Canterbury. He painted also, but in the lighter style, which, as the writer adds,¹ is now so prevalent throughout Scotland, "*sed pictura levior quæ nunc est per Scotiam receptissima*," the chamber and oratory of the abbot, as well as a larger chamber in front of the stair leading to the abbot's chamber.

We know so little of the style of frescoes used in our churches that even the copy now exhibited of this fragment, snatched from the rude hands which destroyed the original, will, I trust, be regarded with interest.

¹ Hist. Abbat. Monasterii de Kynlos, p. 51 (Bannatyne Club).



Fresco from Church of S. Congan, Turrie.

I have already stated that the same record which has preserved to us a notice of some of the abbots of the early monastery of Turriff, has also handed down the name of one of its *ferleiginn*s or scholastic lecturers, from which we may believe that Turriff was not only a seat of religion, but a school of learning.

Domongart, the *ferleiginn* of Turriff, as a witness of a grant to the monastery of Deir by Gartnait, the Mormaer, about 1132, is associated with Nectan the Bishop of Aberdeen, Leod the Abbot of Brechin, Ruadri the Mormaer of Mar, Matadin the Brehon, and others, who were also witnesses.

The Grammar School of Turriff enjoyed a considerable reputation in later times.

Of Thomas Austin, who was its rector about the middle of the sixteenth century, and taught for about 40 years, Dempster speaks in the highest terms:—He was learned in Greek, Latin, and Hebrew, and (what *we* ought to value fully as much) he was “*antiquarius incomparabilis*.”

Dempster received the rudiments of his early education at Turriff, under the auspices of Andrew Ogsten, who is described (perhaps partly in consequence of the vigour with which we learn he used his rod) as “*vir ingenio mediocri*.” He was, however, Dempster adds, “not unlearned,” and wrote various poems, some of them “*elegiaco versu non inculto*.”¹

The small volume or register now exhibited, belonging to me, contains all the deeds relating to the church lands of Turriff to which I have referred, beginning with the “*Carta fundacionis terre ecclesiastice ville de Turreff, continens limites earundem anno Domini 1272*,” and ending with “*Carta consensus Episcopi et capituli Aberdonensis Magistro Willelmo Hay rectori de Turriff facta ad locandum terras ville seu burgi de Turriff in empheteosim pro edificiis policia et hospitalitate habenda*,” in 1548. The deeds in this volume are extracted from the chartulary of the bishopric of Aberdeen, and this copy was probably made about the date of the charter last quoted, when the rector, under its authority and that of a previous deed, was probably engaged in granting feus of the lands for buildings and policy.

¹ T. Dempsteri, *Hist. Eccl. Gentis Scot.* t. i. p. 55; t. ii. pp. 514, 673.

III.

NOTICE OF A BRONZE VESSEL FOUND RECENTLY IN THE VORARLBERG. BY JOHN SHOLTO DOUGLASS, Esq. COMMUNICATED BY WILLIAM BROWN, Esq., F.R.C.S., F.S.A. Scot.

"I send you a drawing I made, and had lithographed, of a very curious bronze pot, tripod, or camp kettle, which was dug up in the beginning of last month, at a height of 200 feet above the valley, by a peasant, on the hill side, between the villages of Düns and Schnifis. The latter you will remember, with its picturesque green spire. The former is barely distinguishable from the road below (although not so high as Schnifis, and only a mile distant), its plain, brown, wood houses being in summer almost buried in fruit trees. It is situate on the way to Sattains. The vessel was found topsy-turvy, nearly 2 feet beneath the surface, and quite empty, to the disgust of the finder, who, when he found he had hit upon a pot, expected a hoard of coin. I have secured the pot, I may almost say *vi et armis*, for the Bregenz Museum. I have coloured the lid and handle red: they are of iron, and much corroded; whereas the bronze vessel itself is in perfect preservation. Dr Keller of Zurich thinks it most likely of mediæval date. Other Zurichese antiquaries are doubtful whether to call it 'middle age' or Roman. I have written to Baron Lacken, in Vienna, about it also, but have received no answer yet. I shall be much interested to hear whether your Antiquarian Museum in Edinburgh contains anything similar. The form of the vessel itself is common enough, and can afford no good clue to the date, or nation who made it; but the graceful angular side handles, and the paw-like feet, are very peculiar. I should have mentioned that the height of the vessel (exclusive of the iron hoop), is a little beneath 10 inches."

What I have read is from a letter written to me by Mr John Sholto Douglass, at Thüringen, in the Vorarlberg, 5th April 1866. The Vorarlberg is the frontier province of Austria, next to Switzerland; and is very interesting from its noble scenery, and its industrious population.

Bregenz, the ancient Brigantium, is the chief town of the province; and a museum, for the reception of antiquarian and natural history specimens belonging to the province, has been established. It already contains a considerable collection of valuable objects in all departments; but it is rich in Roman remains, which are still found in various directions. It will be interesting to the Society to know that a young man, with a Scottish name, elder son of Mr Douglass of Tilquhillie, is devoting his leisure hours to scientific and antiquarian researches in this far-off province.

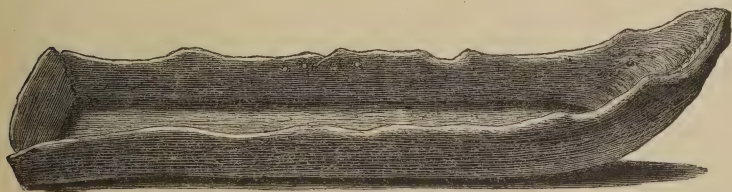
MONDAY, 11th June 1866.

DAVID LAING, Esq., LL.D., Vice-President, in the Chair.

The following Donations to the Museum and Library were laid on the table, and thanks were voted to the Donors:—

(1.) By MRS BAIRD of Closeburn.

Boat or Canoe of Oak, formed of a hollow oak tree, pointed at the bow or front, and having a separate board inserted in grooves for a stern. It measures 12 feet in length, 2 feet in breadth, and 15 inches in depth;

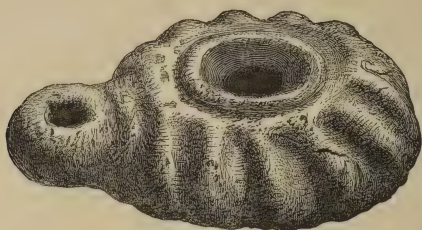


Canoe of Oak found in the Castle Loch, Closeburn.

and was found in 1859, while draining the "Castle Loch," in moss, 3 feet below the surface, Closeburn, Dumfriesshire. (See Communication, page 458.)

(2.) By ALEXANDER SPIERS of Culcreuch, Esq.

Upper Stone of a Quern, measuring 15 inches in its greatest length. Its upper surface is cut into ribs, and has a projection on one side, with a socket for the insertion of a handle (shown in the annexed woodcut). It was found in trenching a shallow moss in the "Standing Stone" park, on the estate of the Donor, parish of Fintry, Stirlingshire.



Upper Stone of Quern found in the Parish of Fintry.

(3.) By ALEXANDER BRYSON, Esq., F.S.A. Scot.

Celt of fine-grained Claystone, measuring $9\frac{1}{2}$ inches in length, and $3\frac{1}{2}$ inches across the face. Found by the late Mr W. Galbraith, A.M., at a depth of 16 feet under the surface, at Claddock, in the Island of Arran.

Celt of dark-green Nephrite or Jade, measuring $2\frac{1}{2}$ inches in length, and $1\frac{1}{2}$ inch across the face, which is worked to a sharp cutting edge. Brought from Kopu, New Zealand.

Iron Water-chamber of a Hookah or Smoking-Pipe, with a Shield, incised and inlaid with silver on each side, bearing the initials J. A.; above each is a *fleur de lis*.

Rules of the Society of Stentmasters of Edinburgh, August 24, 1721-1766. 8vo. MS.

(4.) By the REV. A. R. FINLAY, Houston, through J. Y. MYRTLE, M.D.

Head of a coarse Iron Pike, with portion of the wooden Handle attached. It was dug up in a field at Houston, Renfrewshire, in 1847. In length the blade measures $11\frac{1}{4}$ inches, by 2 inches in breadth, tapering upwards towards the point.

(5.) By Sir WILLIAM WALLACE, Bart. of Lochryan.

Beautifully polished Bead of opaque or honey-coloured Amber, 2 inches in diameter, and $\frac{5}{8}$ of an inch in thickness. Found on the estate of Lochryan, Wigtonshire.

(6.) By Mr ROBERT SCLATER, Die-Cutter.

Collection of Scottish Church-Communion Tokens in Lead. They measure from $\frac{5}{8}$ of an inch to 1 inch in diameter. Some of them are square in shape; others round, oblong, and heart-shaped, and are inscribed as follows:—

ARDOCH CHAPEL, 1796. Let a man examine himself, 1 Cor. xi. 28. *Rev.* blank.—A. K. *Reverse*, blank.—A. S. C. MVSP. *Rev.* M^R A. B. 1788.—CARMANOCK: M. J. H. 1777. *Rev.* blank.—C. K. 1764. *Rev.* Shield displaying a stag's head (the Canongate arms).—Another, with the date 1818.—C. M. 1727. *Rev.* blank.—C. R. 1716. *Rev.* blank.—CRIEFF, 1811. *Rev.* R. S. M.—D. 1726. *Rev.* blank.—Another, with the date 1752.

DALKEITH, Church with tower at one end. *Rev.* KIRK OF DALKEITH, 1765.

EDINBURGH, Castle with three towers, 1741. *Rev.* T. C. D. G. [Dean of Guild].—Another, 1754. *Rev.* D. F. D. G.—Another, 1795. *Rev.* N. M. D. G.—Another, 1805. *Rev.* J. M. D. G.

GALASHIELS, 1814. *Rev.* Church with tower in the centre.—G. K. *Rev.* Church with belfrey.—G. K. 1761. *Rev.* blank.—J. G. H. *Rev.* blank.—J. K. M (in monogram), 1728. *Rev.* blank.—IRVIN 1721. *Rev.* blank.

INVERKEITHING, 1782. *Rev.* M^R E. B.—K. A. 1731. *Rev.* blank.—KIPPAN 1746. *Rev.* blank.—KX. *Rev.* KX.—K^R P. 1741. *Rev.* blank.

LEITH. *Rev.* ALEX. POLLOCK —L. K. 1696. *Rev.* blank.—L. K. 1725. *Rev.* blank.—Others, with the dates 1749, 1757, 1761.—L. P. K. 1730. *Rev.* blank.—LEITH · NEW KIRK · 1766. *Rev.* 1 Co. 11 · 23.—M. K. *Rev.* M^R R. H.—M^R E. G. 1767. *Rev.* blank.

MUTHIL. *Rev.* blank.—NB · K. 1714. *Rev.* blank.—N · K. 1744. *Rev.* M · D · G.

NEWBURNKIRK. *Rev.* A cup, above which is the letter M ·, under, 1739, and I · S at the side.—S · K · 1707. *Rev.* blank.—Another, 1837.—Another, 1819.—S^T C. *Rev.* 1776.—S^T N · R · C. *Rev.* blank.—S^T N · K · 1730. *Rev.* blank.

Eleven Copper Coins, generally of George III.

Ten Scottish Tradesmen's Tokens, Pennies and Half-Pennies of Edinburgh, &c., 1798-1813, copper.

Twenty-Five English Tradesmen's Tokens, Pennies and Half-Pennies, 1789-1814, copper.

Eight Irish Tradesmen's Tokens, Pennies and Half-Pennies, 1792-1813, copper.

Five Copper Medeleets, 1796-1815.

(7.) By DAVID H. ROBERTSON, M.D., F.S.A. Scot.

Deer Horn, with iron frame, rings, and screw, measuring altogether 11 inches in length, used for holding the shank-bone of a large joint, for assistance in carving. From an old castle in Warwickshire.

Shilling of King George II., 1758, in fine preservation.

(8.) By WILLIAM BRAND, Esq., Union Bank.

Two Medals in White Metal, struck in commemoration of King George IV.'s visit to Scotland in August 1822; and one struck on the death of the King, 26th June 1830.

(9.) By Professor Sir J. Y. SIMPSON, Bart., V.P.S.A. Scot.

Egyptian Mummy Case, containing human remains and cloth wrappings. The skull of the mummy is exhibited separately in one of the wall cases.

(10.) By Dr DAMMANN, Hamelin, Corr. Mem. S.A. Scot.

Carved Model, in wood, of a harp-shaped Bronze Brooch, measuring $2\frac{1}{2}$ inches in length. Found at Pymont in Hanover, and referred to in a communication by the Donor. (See Proc. Soc. Ant. Scot., vol. v. page 368.)

(11.) By KENMURE MAITLAND, Esq., Sheriff-Clerk of Mid-Lothian.

Rude and ancient Idol of a naked Human Male figure, $18\frac{1}{2}$ inches in length, with a large head and open mouth, the fingers and toes being indicated by short incised lines. It is formed of a fine-grained green-stone or coarse jade. From Mexico.

Thirteen rude Beads, varying in size from $\frac{3}{4}$ of an inch to $1\frac{1}{2}$ inch in length. They consist of rounded pebbles, perforated in the centre,

and are white and greenish in colour, probably of quartz, serpentine, and other stones. From Mexico.

(12.) By T. B. GRIERSON, Esq., Surgeon, Thornhill, Dumfriesshire, Corr. Mem. S.A. Scot.

Strip of Paper, measuring 5 feet 4 inches in length and 2 inches in breadth, covered with characters; and a circular portion of Paper, $2\frac{1}{2}$ inches in diameter, covered with characters, with a perforation in the centre. Taken from a Buddhist praying-machine.

(13.) By ROBERT CARFRAE, Esq., Curator, S.A. Scot.

Various Autograph Letters and Papers, including those of Edward Gibbon; John Home (1776?); Henry Dundas, M.P., 17th October 1790; Ralph Abercromby, 26th July 1791; Sir Walter Scott, 12th April 1825; two of James Hogg, poet, 27th February 1832 and 25th July 1833; J. Silk Buckingham, 5th August 1841; and T. B. Macaulay, 29th March 1841. Also, the "Order of Battle," addressed to the various officers in command of the Fleet; given on board "The Ocean," at sea, 10th October 1808; signed "Collingwood." A Commission, on vellum, by the East India Company, appointing Alexander Duncan, Esq., to the office of Captain of Infantry, dated 1st August 1771, with the seal and signatures of the Governor and Directors of the Company; and a Commission, on vellum, appointing Alexander Duncan, Esq., Lieutenant-Colonel of the Royal St Andrews Volunteers, dated 11th May 1797, and having the signature of King George III., also the Privy Seal.

Five Shilling Note of the Royal Bank of Scotland, dated 1797.

One Guinea Note of Carrick, Brown, & Co., Glasgow, dated 1813.

Madden's History of Jewish Coins. Royal 8vo. Lond. 1864.

(14.) By ALEXANDER MACKENZIE, Esq., Advertiser Office, Greenock.

"Glasgow Courier," No. 1, September 1791, and No. 11, 194, February 1866, being the first and last numbers of that newspaper.

(15.) By WILLIAM DOUGLAS DICK, Esq., New Club.

Photographs of Sculptured Stones in the churchyard of Inchinnan, Renfrewshire.

(16.) By the Rev. J. A. LEGH CAMPBELL, F.S.A. Scot.

Photographs of Sculptured Stones, found when repairing the walls of St Botolph's Church, Helpston, Northamptonshire.

(17.) By THE SENATUS OF THE UNIVERSITY OF ST ANDREWS.

The St Andrews University Calendar for the year 1866-67. 12mo. Edin. 1866.

(18.) By THE ANTHROPOLOGICAL SOCIETY OF LONDON.

The Anthropological Review. Nos. 12 and 13. January and April. 8vo. London, 1866.

(19.) By the SOCIETY.

Transactions of the Historic Society of Lancashire and Cheshire. Vol. IV. New Series. Session 1863-64. 8vo. Liverpool, 1864.

(20.) By THE ASSOCIATED ARCHITECTURAL SOCIETIES.

Reports and Papers, read at the meetings of the Associated Architectural Societies of the Counties of York, Lincoln, Bedford, &c. &c., for the year 1865. 8vo. Lincoln, 1865.

(21.) By THE WILTSHIRE ARCHÆOLOGICAL AND NATURAL HISTORY SOCIETY.

The Wiltshire Archæological and Natural History Magazine. No. 28. Vol. X. July 1866. 8vo. Devizes, 1866.

(22.) By THE SOCIETY OF ANTIQUARIES OF NEWCASTLE.

Archæologia Æliana. Part 21. New Series. September 1866. 8vo. Newcastle, 1866.

(23.) By THE MANX SOCIETY.

Description of the Isle of Man, by George Waldron, 1731; with Introductory Notice and Notes, by W. Harrison (8vo, Douglas, 1865), being the Eleventh Volume of the Society's publications.

(24.) By THE ROYAL IRISH ACADEMY.

Proceedings of the Royal Irish Academy. Vol. IX. Part 1. 8vo. Dublin, 1865.

Transactions of the Royal Irish Academy. Vol. XXIV. Parts 2, 3. 4to. Dublin, 1865.

(25.) By THE KILKENNY ARCHÆOLOGICAL SOCIETY.

Proceedings and Papers of the Kilkenny Archæological Society. No. 50. Vol. V. New Series. 8vo. Dublin, 1865.

(26.) By the EXECUTORS of the late HENRY CHRISTIE, Esq.

Reliquiæ Aquitanicæ; being Contributions to the Archæology and Palæontology of Périgord and the adjoining Provinces of Southern France. Part 4. 4to. London, 1866.

(27.) By WILLIAM BROWN, Esq., Surgeon, F.S.A. Scot.

Ueber einen befestigten Hügel bei Mauren in Liechtenstein ein vermuthlich Keltisches Werk. Von J. S. Douglass. Juni 1865. 4to. (Pp. 6.)

(28.) By W. H. JAMES WEALE, Esq., Bruges, Corr. Mem. S.A. Scot. (the Author).

Belgium, Aix-la-Chapelle, and Cologne: A New Guide-Book for Travellers. 12mo. London, 1859.

Catalogue du Musée de l'Académie de Bruges. 12mo. Bruges, 1861.

Bruges et ses Environs. Description des Monuments, Objets d'Art et Antiquités, &c. 12mo. Bruges, 1864.

Catalogue des Objets d'Art Religieux du Moyen Age, exposés à l'Hotel Liedekerke, à Malines, Septembre 1864. 8vo. Bruxelles, 1864.

Restauration des Monuments Publics en Belgique. 8vo. Bruges, 1862.

Notice de l'Inscription de Dedicace de l'Eglise de Rixingen. 8vo. (Pp. 4.) Tongres, 1862.

Ivoires Sculptés de Genoels-Elderen, près de Tongres. 8vo. (Pp. 7.) Gand, 1859.

Emploi des Hachures pour Exprimer les Couleurs du Blason. (Pp. 5.) 1866.

Tombe plate en cuivre dans l'Eglise de Sainte-Marguerite à Thielen (Anvers). 8vo. (Pp. 14, and plate.)

Tombe plate en pierre dans l'Eglise de Notre-dame, à Zandvoorde, 1561. 8vo. (Pp. 3 and plate.)

Notes sur Jean Van Eyck. 8vo. (Pp. 32.) London, 1861.

Notice sur la collection de Tableaux Anciens, &c. 8vo. (Pp. 64.) Bruges, 1863.

(29.) There was exhibited the following Articles, purchased for the Museum :—

A Pardon granted by King George III., by which Alexander Macleod, of Muiravonside, Esq., son of Alexander Macleod, advocate, is “Pardoned, remitted, and released by these presents of all High Treason, and all other Treasons, Misprisons of Treason, Felonies, Crimes, and Offences by him committed or perpetrated by himself alone, or with any other person or persons whatever, whensoever or wheresoever, before the 24th day of June 1778.” The document is written on a skin of vellum, measuring 29 inches by 24 inches, and is highly ornamented on three sides by an engraved border. The centre of the initial letter of the King’s name displays a portrait of His Majesty in his coronation robes; attached to it is the Great Seal in wax, in a tin case. The document and seal are enclosed in a wooden box, covered with leather, and ornamented with a gold stamp pattern of leaves and other ornaments.

The following Communications were read :—

I.

ON THE CHAMBERED CAIRNS OF CAITHNESS, WITH RESULTS OF RECENT EXPLORATIONS. BY JOSEPH ANDERSON, Esq., Loc. Sec. A.S.L., CORR. MEM. S.A. SCOT. (PLATE XXVII.)

Some very remarkable and interesting features in connection with the structure of the Chambered Cairns of Caithness were brought to light in the course of a series of explorations undertaken last summer by the writer and Mr R. I. Shearer for the Anthropological Society of London, Dr Hunt, the President of that Society, having liberally placed the necessary funds at our disposal. A full account of the results of these explorations is embodied in the Memoirs of the Society above-mentioned, and the following general outline of the facts observed is communicated to the Society of Antiquaries of Scotland, in the hope that it may be useful in furthering the common object by contributing towards the elucidation of the structural characteristics of these interesting relics of the early population of the country.

In Caithness the term "cairn" is applied both to the burial "cairns," whether chambered or simply enclosing a central cist, and to the ruins of the "brochs," "borgs," or "Picts' houses," as they are called here indiscriminately; but the two classes are usually distinguished by their external appearance, as "grey cairns" and "green cairns," the chambered cairns in all the instances I know being bare heaps of stones, while the "green" or grass-grown "cairns" have always turned out to be "brochs," so far as they have yet been examined. In this paper I purpose to speak only of the chambered cairns, which are externally of two forms.

The commoner form is circular, or slightly oval in its ground plan, and varies in height according to the area of its base, the smallest explored being about 25 feet, and the largest about 80 feet in diameter. It is difficult to ascertain the perpendicular height, as in all cases the top of the cairn has been considerably reduced; but in the larger cairns it seems to be pretty nearly a fifth of the diameter at the base.

The external surface is that of a heap of loose stones. The stones are gathered, not quarried; and even the large monoliths and lintels of the chambers, in a great many instances, are drift stones, with the edges rounded, and abraded ends. The bulk of the stones that compose the cairn are such as might be easily carried by a strong man, and, unless in the passage and chamber, few have been used of such a size as to require the strength of two men. Many of the lintels of the passage and the divisional stones of the chamber in the larger cairns, however, are of great size, some weighing several tons.

Although the idea of a cairn is simply that of a structureless heap of stones, there are not wanting appearances to lead to the belief that, externally, they were not altogether so originally. In several of these circular cairns there is yet traceable the foundation of one, and in some cases two, enclosing outer walls, as will be seen by reference to the ground-plan. The same thing has been observed in some cases with reference to the smaller cairns enclosing a central cist; and this curious feature is specially noticeable in the case of the singular class of cairns which these explorations have for the first time made known in Caithness.

In these, the rarer class of chambered cairns, the double enclosing wall becomes a special feature, and, along with the peculiar shape of the cairn itself, and the prolongation of its curved ends, gives a characteristic

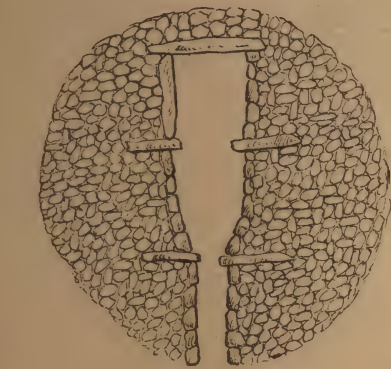
type of cairn structure to which I know no parallel. These cairns, from their peculiar prolongations of the extremities, I have called "horned,"¹ and they appear to be of two kinds—one long, and having the chamber in the one end, and the other short, and having the chamber (like the round cairns) in the centre. The latter type appears to be a blending of the two others; for if the external structure of the horns and the double enclosing wall be removed, there remains a round cairn complete, with enclosing wall and central chamber, though the passage would then be much shorter than it usually is in the ordinary round cairns.

Internally these cairns are all of one type, whatever may be the form they assume as to external structure. The chamber is essentially of the same plan in the round cairn and the long cairn—the cairn with "horns" and the cairn with none. There are structural differences in detail, but the arrangement is the same, and the general plan is one, whatever may be its minor modifications. This will be evident at a glance, from an inspection of the ground-plans of these chambered cairns herewith sent. Of these four were explored by the late Mr Rhind, and have now been accurately measured and laid off to scale by Mr Shearer (who assisted Mr Rhind in his explorations), and for the correctness of the other I am myself responsible.

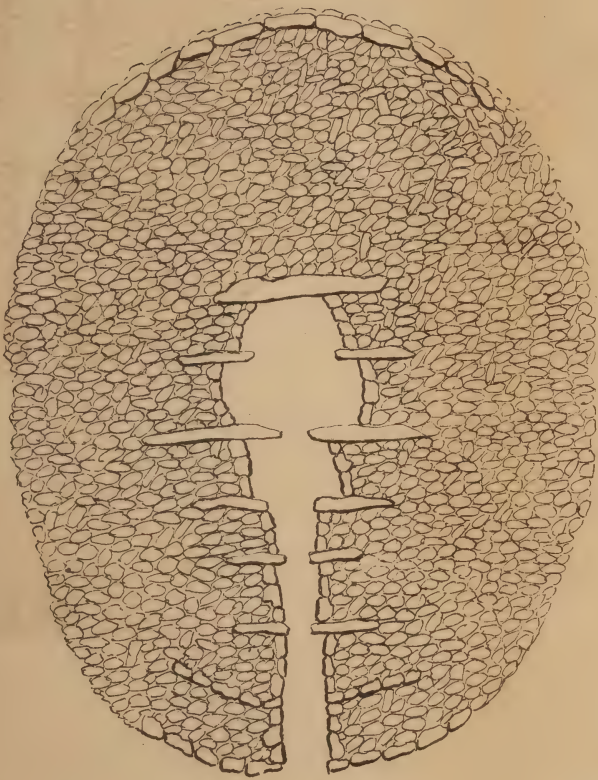
Mr Rhind, in his paper descriptive of these four cairns, characterised the arrangement of the chamber as "radically cruciform," and the typical ground-plan figured to accompany his paper seems rather to favour that idea. I think, however, that the delineation from the actual measurements gives no countenance to the cruciform hypothesis.

The arrangement of the chamber is tri-cameral, the central compartment being always the largest, and the others varying in their proportions to it and to each other. The division into compartments is effected by slabs of large size set on end in the floor, let in to the walls on either side of the chamber, and projecting across the floor till they leave only an opening from the one compartment into the other, sometimes of less than two feet. In those cairns in which the form of the chamber is most rectangular, these divisional stones appear to have served the

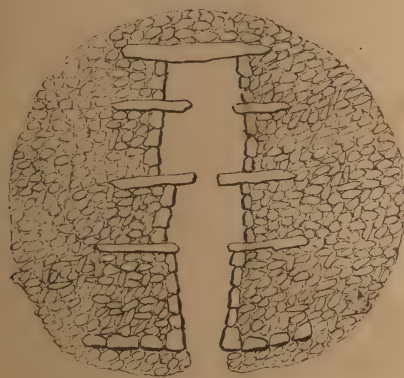
¹ A communication on the "Horned Cairns," from the pen of Mr Anderson, will appear in a subsequent part of the Proceedings.



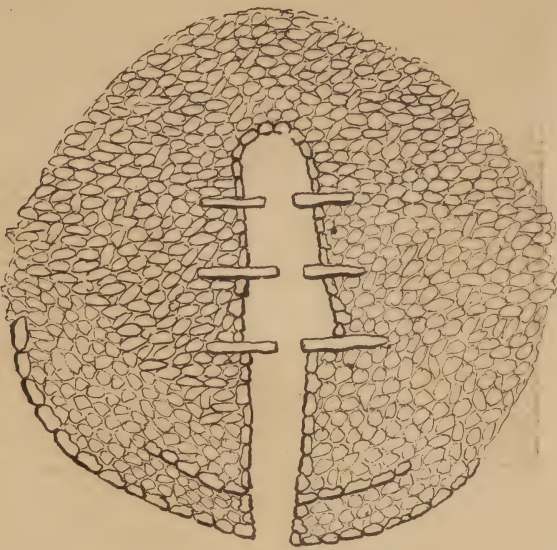
N^o 1



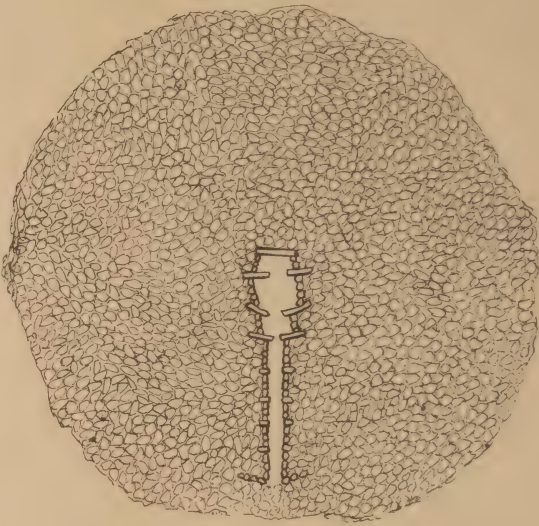
N^o 4



N^o 2



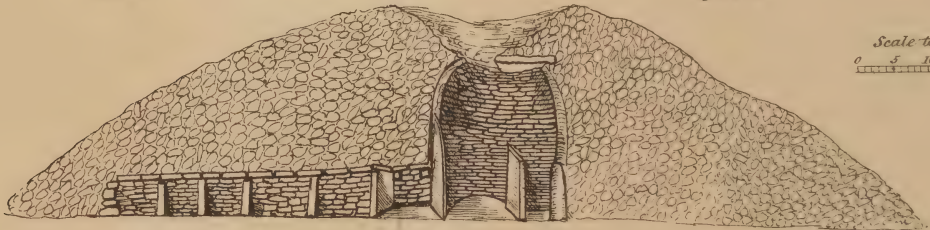
N^o 3



N^o 5.

Scale to N^{os} 1, 2, 3 & 4
0 5 10 20 feet

Scale to N^o 5
0 5 10 20 feet



Section of N^o 5



View of N^o 5 from a Photograph

W. & A. K. Johnston. Edinburgh.

CHAMBERED CAIRNS AT YARHOUSE, THURMSTER, CAITHNESS, OPENED BY M^r RHIND
AND AT CAMSTER, OPENED BY MESS^{rs} ANDERSON & SHEARER.

double purpose of dividing the chamber into compartments and of giving support to the roof, which was most likely of flags laid across from the slightly convergent upper portions of the side walls. In some of the round cairns, again (Nos. 4 and 5, for instance), a different plan appears, as seen on the section of No. 5. Though, on the ground-plan, these two are radically the same as the others, they differ in this particular from the more rectangularly chambered cairns, that the divisional stones which separate the central from the last or furthest compartment do not reach the roof, and only rise about four or five feet above the floor. The first compartment is lintelled over, and has a flat roof of flags the same as the passage, and the other two compartments (by the lowness of the divisional monoliths) being thrown into one, the walls, after rising a few feet above the floor, gradually pass from the sub-rectangular contour of the ground plan into an oval or irregularly circular form, and, finally, converge into a truncated dome, roofed over with flags at a height of about ten feet. The tri-camered arrangement of the ground-plan thus becomes a bi-camered structure, in a horizontal section at a height of four feet from the floor. One out of the five has but two chambers on the ground-plan, and may be regarded as the exception which proves the rule of the tri-cameration.

The round cairns have their openings directed to no particular point of the compass, some being almost the exact reverse of the others; but the long cairns all lie pretty nearly east and west, and have the chamber in the eastern end, which is also the highest, the ridge of the body of the cairn falling away towards the west end.

Of these long cairns I only know three in the county—two at Yarhouse, Thrumster, and one at Camster—both places being in the parish of Wick. The two at Thrumster have been explored, the third has not.

The extreme length of the larger long cairn, from tip to tip, is 240 feet. The breadth of the base of the body of the cairn behind the horns at the eastern end is 66 feet, and the line across the tips of the horns 92 feet. These measurements at the west end are 36 feet and 53 feet respectively. The smaller long cairn is 190 feet in extreme length. The breadth of base behind the horns at the eastern end is 43 feet, the horns expanding till the line across their tips measures 62 feet. The same

measurements at the west end are 26 and 34 feet respectively. The "horns" are defined by a double dry-built wall, of which only the foundations remain in the larger cairn; but in the smaller it is still standing to a height of about 5 feet, where it joins the passage, falling gradually to ruin as it extends outwards. These walls are both "faced" only on the outer side, and they slope slightly inwards. In the smaller cairn the distance between them is about $2\frac{1}{2}$ feet at the maximum towards the entrance to the chamber, and about 18 inches towards the tips.

The internal structure of the two long cairns differed in the details of the construction of the chamber, though the general plan was radically the same as in all the chambered cairns. In the larger cairn the chamber was smaller than in the other in proportion to the bulk of the body of the cairn. Both consisted, as usual, of three compartments; but while in the larger cairn the third or furthest compartment was very small and low, and roofed over by a single immense block of stone, the last compartment of the other was of a semicircular form, like that of the round cairn No. 3. About seven feet of the height of the internal walls remained in the larger, and about five feet in the smaller cairn. Besides the slabs which stood across the floor as divisional stones in the smaller cairn, the central compartment had a very large slab on either side built into the wall as part of the enclosure of the chamber, the face of the slabs making part of the face of the walls.

In the first compartment of the smaller cairn a short cist was found set on the floor in the space between the entrance and the first divisional stone on the south side. It was about 4 feet long, by 20 inches wide, and was filled internally with partially blackened clay, in which was a whitish stratum as of burnt bones. An urn, with the twisted cord ornamentation, lay on its side at the east end, and through the clay were scattered a quantity of beads of lignite, about the size of, and similar in form to, the cross sections of the small end of the shank of a tobacco pipe. Beneath the urn a few lay end to end in a line, as if they had been strung when put in. Seventy of these were recovered by washing the clay that came out of the cist. The appearance and position of the cist was such as to lead to the conclusion that, as regards the chamber, it was a "secondary interment." The way in which the space between the end of the chamber and the divisional stone was adapted to the con-

struction of a cist, and the fact that the end of the stone forming the outer side of the cist projected into the passage-way, seemed to indicate that it was not part of the original purpose or structure of the chamber.

In the chambers of both cairns indications of a rough paving of small irregularly-laid slabs were found, and the floors of both were covered to the depth of several inches with a layer of clay highly charged with charcoal, and fragments of burnt and unburnt bones. In the larger cairn, however, no fragments of bone larger than an inch in length, by less than half an inch in breadth, were found, the extreme comminution of the bones being the most singular feature in connection with it. In the smaller cairn burnt and unburnt bones, broken, but not comminuted, were found in considerable abundance, both on and in the layer of clay mixed with ashes which formed the floor of the chamber. Along with a number of animal bones (broken) a portion of a human upper jaw, a few phalanges of fingers or toes, and several detached human teeth, were found in the central compartment of the chamber of the smaller cairn; and in the furthest compartment the frontal portion of a human skull, with other fragments of skulls, and a quantity of other human remains and some animal bones, lay scattered over the floor and partially imbedded in the clay.

In the larger cairn the only manufactured objects found were a few flint chips and two pieces of well-made pottery, blackened by fire. The flint chips were unburnt. In the smaller cairn not a single flint chip, and no vestige of pottery was found, the only manufactured objects it contained being the urn and beads from the (secondary) cist.

The Ormiegill cairn, as I have said, combined the specialties of external structure of the "horned" and the round chambered cairns. It differed from the long cairns, inasmuch as its greatest length did not much exceed its greatest breadth, viewing the "horned" structure as really the cairn, while it agreed with them in having the larger horns in front of the chamber, the entrance midway between them, and the smaller horns to the rear of the cairn. On the other hand, it agreed with the circular cairns, inasmuch as the chamber was placed in the centre, and had an enclosing circular wall. From this arrangement the idea is suggested that the central portion of the cairn, being apparently complete in itself as an ordinary round chambered cairn, the exterior

structure of the double wall defining the "horns" may have been a subsequent addition; but there is no evidence to guide us in drawing conclusions of this kind; and the smaller long cairn at Yarhouse, Thrumster (before described), has the appearance of the foundation of a circular wall, 30 feet behind the chamber. Before excavation, the Ormiegill cairn was, to all outward appearance, a common round cairn; and had we not been led to search in the body of the cairn for "horns," in consequence of the puzzle which the investigation of the Thrumster cairns had raised, we might have been content with a simple examination of the chamber and passage.

The "horns" are defined by parallel walls, both of which "face" to the outside, the one being thus built against the other as it were. The distance from the face of the outer to the face of the inner wall is about $2\frac{1}{2}$ feet all round. They are all well built, the stones used being mostly long and flat, and the space between the walls of a more rubbly character. From two to three feet of the height of these walls remains, and they seem to have had a considerable slope inwards, instead of rising perpendicularly. This also was observed in regard to the "horns" of the smaller long cairn at Thrumster. The breadth of the tips of the front horns flanking the entrance is 8 feet, and the distance from the inner corner of the tip of the one to that of the other is $50\frac{1}{2}$ feet. The breadth of the back "horns" is 9 feet at the tips, and the distance between their inner corners in the same way is 37 feet. The distance between the tips of the "horns" sideways along the length of the cairn was 66 feet on the one side, and 64 on the other. The horns extended about 30 feet outwards from the circumference of the circular wall enclosing the chamber. They are slightly convex at the tips, and are placed by compass as follows:—Front, E.S.E. and S.S.W. respectively; back, N. and N.N.W. respectively; line of passage, S.S.E.

The circular wall around the chamber is 80 feet in circumference. It is built of squarer, heavier blocks than either the internal walls of the chamber or the exterior walls of the "horns," and is, like them, faced to the outside only, and has a considerable inclination inwards. About four feet of its height remain in some parts.

The chamber itself, being of the usual tri-camered structure, need not be minutely described. It had a rough paving of small flags, irre-

gularly laid and broken up in the middle. Both over and under this rough pavement there was a thick layer of ashes, plentifully mixed with bones, human and animal, burnt and unburnt. Among the teeth of animals I could recognise those of the horse, ox, and dog. The long bones, both human and animal, were all broken, but not comminuted, and many were burnt quite black—converted into bone-charcoal. Some pieces of skull and phalanges of human fingers or toes were thus charred. In the central compartment were found the broken palates of two children, and several fragments of the adult human skull. A thick layer of very small animal bones occurred, which, unfortunately, were not got preserved. They were smaller even than the bones of small birds.

The manufactured objects found were a large number of fragments of pottery and flint chips; two very well finished arrow-heads of flint, one barbed; the point end of a fine flint knife, with ground edge; a disc of flint, about an inch in diameter, of the circular form, known as "thumb-flints;" and a finely-polished hammer of grey granite, perforated for the handle. Drawings of these are sent along with this paper.

The large round cairn at Camster (of which the ground-plan and section are given on No. 5) is one of those in which the tri-camered arrangement on the ground-plan is merged into a bicamered arrangement of the compartments in the section as previously explained. It is the only cairn I know that has any part of the roof remaining on the chamber. Its circumference at the base is about 220 feet, and the interior height of the chamber 10 feet. Except as to its vast size and general completeness, it has no special feature of difference from those described by Mr Rhind.

The floor of the chamber had no appearance of paving, and the clay was blacker and more earthy than that in the cairns previously described. The number of human bones was greater, and the proportion of animal bones less, than in the "horned" cairns. Most of the bones were on the floor, and fewer imbedded in it; and though there was a large quantity of ashes and charcoal scattered over the central compartment, and specially in the centre of the chamber and between the projecting divisional stones at the back, there were very few burnt bones. The fragments of skulls were numerous, and the bones that were got on the floor were chiefly those of the upper extremities.

The manufactured objects obtained from the clay of the floor were chiefly fragments of pottery, some being parts of vessels of very large size, and others of very fine make, and small size. Some were ornamented with incised lines, and one pitted all over with the point of a finger, the ornamentation being formed by the point and nail of the finger being thrust obliquely into the soft clay, thus making a depression and raising a ridge at the finger point at the same time. A small but very finely made flint knife was found buried in the floor, and near by a nodule of iron ore, about the size of a man's fist; while on the floor, among the bones, lay part of a broken thick-backed iron knife or dirk. The part found was the heft end, having a "tang" for insertion in the heft nearly three inches long. It was so much oxidised that the section across the blade (the back of which seemed to have been more than double the thickness of a large clasp knife) only showed a strip of bright metal little thicker than stout paper when tried with a file. I question whether it could have been the contemporary implement with the flint knife that lay below the clay; but the presence of the nodule of ore in the floor complicates the question of probabilities so much, that it is vain to speculate on the matter.

A curious feature in connection with this cairn was that, though the passage, which was upwards of 20 feet long, by 2 feet wide and $2\frac{1}{2}$ feet high (heightening and widening slightly, however, as it drew towards the chamber), was closely packed with stones from roof to floor and from end to end, two skeletons were found about half way between the chamber and the outer end of the passage. Of the skeletons only the upper extremities remained; and the skulls and arm bones were not on the floor, but among the stones above it. The suggestion of the circumstances was that the bodies had been placed there in a sitting position, and the stones that blocked up the passage packed in about them. No vestige of the pelvis or lower extremities remaining, appeared to indicate that they had been in contact with the wet floor, and had sooner decayed. The skulls and bones of the upper part of the trunk were all in fragments, though otherwise in good preservation, but perfectly deprived of their gelatine.

As to the age of these different classes of chambered cairns and their relation to each other, and to the commoner "green cairns" of the county, it is premature to hazard an opinion. Systematic and carefully conducted

investigation of these and kindred remains in Caithness, I believe, may reasonably be expected to throw new light upon the early history of our country; but at the present stage of our knowledge of the facts connected with these early remains we are only at the threshold of archæological inquiry. The field of investigation here, from its peculiar circumstances, is wider, and the materials for collation and induction much more abundant, than in most other parts of the kingdom; but the progress of agricultural improvement and the pottering of amateur curiosity-hunters will soon sweep the last vestiges of the primitive races from the face of the country, and blot out for ever one of the richest pages of our prehistoric records.

II.

NOTICES OF ROBERT RIDDELL, OF GLENRIDDELL, ESQ., AND OF SOME OF HIS MANUSCRIPTS AND BOOKS. BY JAMES IRVINE, ESQ., F.S.A. SCOT.

Robert Riddell, Esq., resided at Friars' Carse, in Nithsdale. In "The Land of Burns," by Professor Wilson and Robert Chambers, vol. ii. p. 15, they say:—

"When Burns took up his abode at Ellisland, his nearest neighbour to the west was Mr Riddell of Glenriddell. Friars' Carse, the residence of this gentleman, is about a mile from Burns' farm-house, being, like it, situated immediately beside the Nith. Riddell was an antiquary of some note, and an agreeable friend; and Burns no sooner came to settle at Ellisland, than he was welcomed to Friars' Carse. He says somewhere of the worthy captain and his lady, '*At their fireside I have enjoyed more pleasant evenings than at all the houses of fashionable people in this country put together.*' For the anniversary of the union of this couple, he wrote his song, 'The Seventh of November,' the music of which is said to have been by Mr Riddell himself. With reference to a hermitage in the woods, near the house, Burns likewise wrote his fine English verses:—

"Thou whom chance may hither lead,
Be thou clad in russet weed,' &c. &c.

"In the mansion, on the 16th of October 1790, took place a bacchanalian contest, which makes a conspicuous figure in the poems of Burns, the object being the possession of a certain ebony whistle, which had been introduced into Scotland by a Dane, who came over in the train of Anne, the consort of James VI. Sir Robert Lawrie of Maxwellton had gained the whistle from its original owner by overcoming him in drinking; but it was lost by his son to the ancestor of Mr Riddell. On the present occasion, Mr Riddell, Sir Robert Lawrie of Maxwellton, and Mr Fergusson of Craigdarroch (father of the late R. C. Fergusson, Esq., M.P. for Kirkcudbright) contended for it, and

" 'A bard was selected to witness the fray,
And tell future ages the feats of the day.'

"It is scarcely necessary to particularise, that 'when six bottles a-piece had well worn out the night,' Glenriddell retired, and Sir Robert fell from the table, so that Mr Fergusson became the victor. The whistle is still in the possession of his family."

Among the "Original Letters" of Burns, published by Cadell and Davies in 1814, the 37th letter is that which Burns addressed to Mr Riddell on the day on which "the Whistle" was contended for, and including the lines—

"Here are we met, three merry boys,
Three merry boys I trow are we," &c. &c.

In the Ballad which Burns wrote on "The Whistle," beginning—

"I sing of a whistle, a whistle of worth,"

he speaks of Mr Riddell as "a high ruling elder."

In the eighth volume of Mr Riddell's manuscripts, beginning at page 132, is an account of his journey from Friars' Carse to Edinburgh, whither he went "*as elder from the Presbytery of Dumfries to attend the General Assembly of the Church of Scotland.*" In this journey, and on several of his antiquarian excursions, he was accompanied by Captain Francis Grose, author of the "*Antiquities of England and Wales,*" &c.

In the "Land of Burns," vol. ii. p. 28, there is a picture of Francis Grose, accompanied by a brief account of him. The authors say—"It was in 1789, while travelling in Scotland, for the purpose of drawing

and chronicling the antiquities of that country, that he met with Burns at the hospitable table of Mr Riddell, in the mansion of Friars' Carse. The figure of the man, which was justly said to be the very title-page to a joke—his numberless droll remarks and stories—and, in perhaps a less degree, his great learning and shrewd penetrating sense—made a great impression on the poet; and, to use the words quoted on the occasion by Mr Gilbert Burns, the two became 'unco pack and thick thegither.' The intimacy was a memorable one for the admirers of Burns, for it led, as is well known, to the composition of "Tam o' Shanter," which first appeared in "The Antiquities of Scotland," published next year. The verses in which Burns sketched off the figure, character, and habits of the antiquary, are those beginning:—

" A fine fat fodgel wight,
 * * * *
 By some auld, houlet-haunted biggin',
 * * * *
 He has a fouth of old nick-nackets," &c.

and four other verses.

Among Burns' poems is that "On the late Captain Grose's Peregrinations through Scotland," the first verse of which is so often quoted:—

" Hear, land o' cakes, and brither Scots,
 Frae Maiden Kirk to Johnny Groats;
 If there's a hole in a' your coats,
 I rede you tent it;
 A chield's amang you taking notes,
 And, faith, he'll prent it."

The manuscript volumes in the following catalogue contain a great many original drawings by Francis Grose:—

Burns left on record his esteem and gratitude in his "Sonnet on the Death of Robert Riddell, Esq.;" and in the lines "On Robert Riddell:"—

" To Riddell, much-lamented man,
 This ivied cot was dear;
 Reader, dost value matchless worth?
 The ivied cot revere."

Burns also wrote an "Impromptu on Mrs Riddell's Birth-Day," beginning—

"Old winter, with his frosty beard," &c.

Mr Riddell's manuscripts appear to have been all written at Friars's Carse. Vol. VII. contains three different views of the house (at pages 2, 50, and 204), with some account of the house, and the persons by whom different parts of it were erected.

Vol. VIII. was "finished at Friars' Carse, June 2, 1790," see page 298. This was only four years before Mr Riddell's death.

"The mansion of Friars' Carse is placed on the site of a religious building, which was a dependency of the Abbey of Melrose. In a lake hard by there is a small island, formed on wooden piles, in which the religious kept their valuables in times of peril. Friars' Carse now belongs to Mrs Crichton, the widow of a gentleman who has made his name for ever memorable in Dumfriesshire, by leaving a hundred thousand pounds to be applied to charitable purposes in the county—out of which fund an asylum for the mentally infirm has recently been erected, on a magnificent scale, at Dumfries.

"The room in which the whistle was contended for is still an object of interest with strangers."—"The Land of Burns," vol. ii. p. 17.)

CATALOGUE—*Manuscripts.*

No. 1. "A Collection of Scottish Antiquities, selected by Robert Riddell." Vol. III. 1786. Folio. Containing—Account of the Succession to the Barony of Kendal. Genealogy of Curwens, &c. A Glossary of Antiquated Words, English and Scottish, collected by R. Riddell. Extracts referring to Border History. The Royal Treasury Accounts for 1474, &c. Excerpts from the Register of the Abbey of Holmcultram, in Cumberland, 67 pages, chiefly Charters, with Index. "Historical and Genealogical Collections, selected by R. Riddell." Containing—"Extract from the Council Book of Pittenween" (1651). Notices of castles, with pictures. Claims for certain Offices (Regality, &c.), made by John Campbell of Calder, the Duke of Argyll, the Duke of Queensberry, Sir Andrew Agnew, the Earl of Eglintoun, the Marquis of Annandale, Robert Riddell, and others. Account of Saxon and Roman Antiquities,

with illustrations. At page 64 of this volume is a drawing and description of a very curious carved stone, found at west side in Eskdale Muir. At page 67, Charter by Robert II., anno 1373, of lands in Annandale to Nigel Ewart, &c. At page 256, a copy of a curious inscription on the outside of a church near Warrington—"To the memory of Oswald, a Saxon King of Northumberland, slain in battle by Penda, the Mercian King, August 5, 642;" the copy made for Mr Riddell, by Thomas Barrett of Manchester, January 30, 1787.

No. 2. "Scottish Antiquities." Vol. VII. This volume is illustrated by many original water-colour drawings, chiefly by Francis Grose and Thomas Cocking. The volume contains—"An Account of the Ancient Lordship of Galloway, from the most early period to the year 1455, when it was annexed to the Scottish Crown; many charters," &c. "A Tour in Nithsdale;" and "Letters of Correspondence between Charles I. and the Earl of Nithsdale." "An Excursion, by Dr Clapperton, to Lough Urr;" and "An Old Scottish Ballad, called the Bedesman of Nithsdale." This volume contains twenty-one coloured drawings, by Francis Grose and others; sixteen etchings, by Adam de Cardonnel; fifteen engravings; and, at page 210, a drawing by Cardonnel, of the head of the effigy of John de Sacro Bosco, &c.

No. 3. "Scottish Antiquities." Vol. VIII. Containing—The Historical Genealogies of the ancient and noble House of Seton, written by Sir Richard Maitland of Leadington (in 1545), copied from a MS. written by Viscount Kingstone; with two pictures of Seton House. List of Pictures relating to the Topography of Scotland. The Memoirs of Mr W. Vetch, Minister of the Gospel at Dumfries. Journal of a Tour in Scotland in 1789, by Captain Grose and Mr Riddell. Journal of an Excursion from Dumfries to Edinburgh in 1790, with Francis Grose. Notes, critical and historical, on Macbeth. Eight water-colour drawings, by F. Grose and others; sixteen etchings, by A. de Cardonnel; forty-six engravings.

No. 4. Vol. IX. "Scottish Antiquities." Containing—Continuation of Accounts of Scottish Castles. List of eighty-six castles, of which pictures and MSS. accounts are given in the work. On Carved Stone Monuments in Scotland. A collection of twenty-one water-colour drawings, by Francis Grose and his servant (Thomas Cocking); and numerous

drawing of antiquities, &c., in Indian ink; and thirty-two engravings inserted.

No. 5. Vol. XI. "Scottish Antiquities (1791)." Containing—A Collection of Old Scottish Ballads, with Notes—88 pages. Mr Riddell says—"None of them are to be met with except *in a very few manuscript collections.*" Facts relating to Locker River and Moss. History of Dumfries (130 pages), with illustrations. Four drawings and twenty engravings inserted.

No. 6. "Scottish Heraldry" (on back). Inside, "Glenriddell's Collections of MSS. No. 24. RR." This volume contains three printed works, with MS. notes, viz.,—1. "Observations upon the Laws and Customs of Nations as to Precedency. By Sir George Mackenzie of Rosehaugh. Edinburgh, 1680." 2. "Scotland's Herauldrie: the Science of Heraldry, treated as part of the Civil Law, and Law of Nations. By Sir George Mackenzie, 1680." 3. "Various Pieces of Antiquity, communicated to the Society of Antiquaries of London. By Robert Riddell, Esq. of Friars' Carse, near Dumfries. 1791. Large plates." Then follow 105 pages of MS. relating to Heraldry, with many engravings and etchings, copies of seals, coats of arms, inscriptions, &c.

No. 7. "Fragments." One vol. 4to. MS. Containing—Extracts in Prose and Poetry.

No. 8. "Scottish Topography." A quarto volume, interleaved throughout; with this MS. title inside, "Additions made to the Scottish part of Mr Gough's British Topography. By Robert Riddell, Esq. of Glenriddell, at Friars' Carse. Anno 1791." These "Additions" were written by Mr Riddell with a view to a new edition of Mr Gough's work being published. The volume contains various references to Mr Riddell's MS. volumes; and at page 663, a list of drawings, etchings, &c., contained in his MS. volumes.

(The preceding List of Mr Riddell's MS. collections is followed by a list of printed books and pamphlets. Some of these, such as Pennant's Tour in Scotland, 3 vols., are described as containing MS. notes; but the list is not of sufficient importance to be subjoined.)

III.

NOTE OF THE DISCOVERY OF ENGLISH PENNIES OF EDWARD I. AND II., IN THE PARISH OF KEIR, DUMFRIESSHIRE. By GEORGE SIM, ESQ., CURATOR OF COINS, S A., SCOT.

The Procurator-Fiscal at Dumfries lately forwarded to the Exchequer 141 pennies of Edward II. and I., found in the parish of Keir in the month of October last, "having been enclosed in a horn, which was, at the time of discovery, protruding from an earth bank." The coins, from the time of discovery, have been till last week in the possession of one of the factors of the Duke of Buccleuch. Some of the local museums being desirous to possess the coins, I have advised that the whole should be restored to the finder, who, in this way, may realise a larger sum than I could recommend should be paid for them. The coins being all very common, we require none of them for the Society's collection.

On examining these coins, they were found all to be well preserved. Many of them read EDWARD, &c., showing that they belong to Edward II. I subjoin a list of the mints, with the number of each :—

| | | | | | | |
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IV.

ACCOUNT OF A CANOE OF OAK FOUND IN THE CASTLE LOCH OF CLOSEBURN, DUMFRIESSHIRE. By JOHN ADAM, Esq., CLOSEBURN CASTLE.

This Canoe (see woodcut, page 435) was found by a party of drainers, on Tuesday the 5th April 1859, in the north-east portion of the Castle Loch, imbedded in the moss about three feet below the surface, and resting on its keel or bottom. It appeared just as if it had been stranded by the receding of the waters; and partly sinking in moss, from its greater specific gravity, the yearly deposits of vegetable matter would soon effectually hide it from view. The position of the Canoe when found was pretty nearly east and west, and the drains, which were being cut 4 feet deep and 18 feet apart, were running south-west from north-east. One of these drains struck the canoe on the stern, and had the drain been two feet out of position, the canoe would still have been lying buried in its mossy bed. The Canoe has been formed, much in the usual way for such craft, out of a single oak tree, and is 12 long and 2 feet wide in the middle. The strangest part of its construction seems the loose stern-board, fitting into a groove. No doubt it would be lighter than the solid timber, but, one could fancy, very troublesome to keep water-tight. The moss was probed carefully all round where the Canoe was found with a pointed iron rod 12 feet long, but no other solid substance was met with. The old site or bed of the Loch was about 195 feet above the level of the sea, and extended to about 12 acres, but in olden times, it is highly probable, the water flowed over 60 or 70 acres. Closeburn Castle, said to be upwards of 1100 years old, stands on the east side of what was known as the Loch proper about thirty feet above its bed, and was at one time all surrounded with water. A drawbridge on the east was the only way of approach to the Castle and its grounds, occupying at that distant date a dry-land area of not more than four acres.

Since the finding of the Canoe, in 1859, the Loch has totally disappeared, being converted with the adjoining mosses into a grass-field, the pasturage of which yields 60s. of yearly rent per statute acre.

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ON ANCIENT SCULPTURINGS
OF
CUPS AND CONCENTRIC RINGS, &c.

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Among the earliest, and yet the most enduring traces of archaic man in this country, are probably to be reckoned his cuttings or sculpturings on rocks and stones. Some of his rudest, and hence, perhaps, his most primitive lapidary carvings, consist of rounded shallow excavations, pits, or cups, and of incised rings or concentric circles. In the present communication it is my object to collect and describe a variety of instances of these ancient lapidary markings of man as they are seen both on separate stones and upon solid rocks in Scotland; illustrating them freely, as occasion may require, by examples taken from other parts of the British Islands.

In attempting to follow out this object, I shall describe first, the chief generic forms of the cup and ring cuttings, and the principal deviations from these generic forms; the localities in which these archaic sculpturings have been found, with the peculiarities of the individual specimens; and the analogous lapidary sculptures found in one or two neighbouring countries. Afterwards, I shall consider various general questions in regard to their meaning, their geographical distribution, the kind of instruments by which they were cut, the age at which they were produced, the people who probably carved them, &c.

PART I.

VARIETIES IN THE SCULPTURINGS.

The cup and ring-cuttings, which constitute the special subject of the present essay, vary much in configuration, size, relations, form, &c. We know, however, that they are all allied to each other, and have a common origin, and probably a common import, from the fact that, though not unfrequently seen separate, we often also find them more or less grouped and co-existing together in different combinations upon the same, or upon adjoining stones and rocks. Amidst the numerous varieties of them which have already been discovered, six or seven general types can be easily traced; and the enumeration of these types in the first instance will simplify the study of the whole subject.

CHAPTER I.—PRINCIPAL FORMS OR GENERIC TYPES OF THE CUP AND RING CUTTINGS.

FIRST TYPE.—Single Cups. (See Plate I. Type 1.)

The simplest type of these ancient stone and rock cuttings consists of incised hollowed-out depressions or cups, varying in diameter from an inch to three inches and more in diameter. For the most part these cup-cuttings are shallow. Consequently their depth is usually far less than their diameter; it is often not more than half an inch, and rarely exceeds an inch or an inch and a half. On the same stone or rock surface they are commonly carved out of many different sizes. These cup-excavations are on the whole usually more smooth and polished over their cut surfaces than the ring-cuttings are. Sometimes they form the only sculpturings on the stone or rock, as on many Scottish monoliths; but more frequently they are found mixed up and intermingled with ring-cuttings. Among the sculptured rock surfaces, for instance, in Argyleshire, there are in one group at Auchnabreach thirty-nine or forty cup-cuttings, and the same number of ring-cuttings; and at Carnban there are twenty-nine figures,—namely, nine single cups, seven cups surrounded by single rings, and thirteen cups encircled by a series of concentric rings. (See Plate XXII.)

Hitherto archæologists have had their attention chiefly or solely taken up with the concentric circles or ring-cuttings, to the comparative or entire exclusion of the cup excavations. In some model specimens, for example, of the so-called "Concentric Ring-Cuttings," from Chatton-law in Northumberland, published in the *Illustrated News* last year (March 19, 1863), and copied into Plate XXIV., there are more cups than rings. On several others of the sculptured Northumberland stones the cups considerably exceed the groups of rings in number.

The simple cup-cuttings are generally scattered singly, and apparently quite irregularly, over the surface of the stone; but occasionally they seem placed in groups of four, six, or more,—almost in a methodic and constellation-like arrangement. Usually the edge of the cup is smooth and regular in its circumference; but occasionally it is depressed or guttered at one point, or on one side. (See Plate II. fig. 1.)

Before proceeding further, let me here remark that all the cup-like excavations which we meet with on megalithic circles, monoliths, &c. &c., are not by any means the work of man. Many of them are, on the contrary, the work of nature; or, in other words, the results of the weathering and disintegration of the stone from long exposure. Among the endless vagaries of shape and form effected on rocks by weathering, cup-like excavations occur frequently on the surfaces of sandstone and other softer rocks, like those of the Lundie Stones in Fife and the Duddo Circle in Northumberland; and I have found them also on the surfaces of far denser stones.¹ Occasionally they are the result of the mineralogical constitution of the rock, as of softer portions weathering out, or of the enucleation of fossilized organic remains, or of imbedded stone-nodules. Thus the surface of the Carline Stone, near Dunmore House, presents a series of smooth, cup-like excavations; but they are all the result of

¹ The very hard "Sarsen" stones or sandstone grits of Abury and Stonehenge show in many parts weathered irregular cavities and excavations; some of them large and deep. Speaking of the Abury stone, Dr Stukely long ago observed, "In some places I thrust my cane, a yard long, up to the handle, in holes and cavities worked through by age, which (he argues) must needs bespeak some thousands of years continuance" (see his "Abury," pp. 17 and 39). The massive rusty conglomerate blocks forming the circles at Stanton Drew are still more remarkably drilled with crystalline cavities, and the corrosions of time.

round included masses having been weathered out of the amygdaloid rock of which the stone is composed. Nor are all cup-like excavations, which are not the effect of weathering, the result of human agency. On visiting the so-called cromlech or chambered tumulus on the Orme's Head above Llandudno, I found various excavations on its stones, and specially on the interior of the covering stone; but a little examination of their smooth surfaces and expanding interiors showed that the excavations had been the work of the Pholas, when these stones formed part of the sea-beach.

In many cases it is difficult, and indeed impossible, to determine conclusively whether cup-excavations, when found alone, are the product of human art or the product of nature. But various collateral circumstances often tend to evince their artificial origin, such as—1. The limited size, regular rounded forms, smooth surfaces, and shallow depths of the excavations; 2. Their existence upon the surfaces of rocks too hard to be readily weathered; 3. Their arrangements in rows or in other artificial positions and groupings not referrible to any mineralogical peculiarities in the stone; and, 4, and specially, their co-existence with other cups surrounded by single or multiple rings, such as we have now to describe as additional types of these ancient lapidary carvings.

SECOND TYPE.—Cups surrounded with a Single Ring or Circle.

(See Plate I. Type 2, three figures.)

In this second type each round excavation or cup-cutting is surrounded by an incised ring-cutting. The ring is usually considerably shallower than the cup, and forms, as it were, a border or setting to it. It is more frequently placed around large than small cups. Sometimes the ring is complete and unbroken; but often also it is traversed at one part by a radial groove or gutter, which occasionally runs directly from the central cup outwards through, and even beyond the ring. More rarely the groove appears in the edge of the cup, and not in the corresponding part of the ring. Sometimes the ring, as it meets the straight radial groove, flexes and bends downwards with it; and more rarely it terminates in new cups. (See Plate XIV. figs. 3 and 4.)

THIRD TYPE.—Cups surrounded with a series of Concentric Complete Rings. (See Plate I. Type 3.)

In this type of these lapidary sculpturings the central cup is surrounded by two or more concentric rings. Each ring is, as we proceed from within outwards, larger and more expanded than that which it encloses, and every ring in this type is in itself a perfect circle. The series of concentric rings varies in number, from two up to six, seven, or even more. In this complete annular form the central cup is generally more deeply cut than the surrounding rings,—but not always.

FOURTH TYPE.—Cups surrounded with a series of Concentric but Incomplete Rings, and having a straight Radial Groove. (See Plate XXV. Type 4.)

This type constitutes perhaps the most common form of the circular lapidary carvings.

It consists, like the last annular type, of a series of expanding rings cut around a common cup centre. But in this fourth type the circles of which these incised ring lines consist are not complete; and this *incompleteness* in the circles constitutes, along with the direct radial line, channel, or duct which produces the incompleteness, the double characteristic of the fourth type of these lapidary carvings.

The incompleteness is produced by an incised straight, radial line, channel, or groove, running from the centre of each circle to its circumference. The circles generally, at either extremity, touch this radial line; but sometimes they terminate on each side of it without touching it. This incised radial groove occasionally extends considerably beyond the outermost circle; and generally, but not always, it tends in a direction more or less downwards along the stone or rock. Sometimes it runs on and unites into a common line with other ducts or grooves coming from other circles, till thus several series of concentric rings are conjoined into a larger or smaller cluster, united together by the extension of their radial branch-like grooves. More rarely it runs into, and ends upon, the circumference of another circle, or even traverses part of it.

In this fourth type the average number of concentric rings is from

three to six, and the average diameter of the outermost ring-cutting from ten to sixteen inches. But occasionally the diameter is much larger, and the number of rings greater. I measured one specimen at Auchnabreach, in Argyleshire, three feet in diameter, and consisting of eight concentric rings. (See Plate XXI.) One of this size, and consisting of seven concentric rings, existed sometime ago on Chatton-law, as I am informed by that excellent archæologist, Mr Tate of Alnwick, but has latterly been much destroyed. He has measured another in Northumberland still larger,—viz., three feet three inches in diameter, and consisting of eight circles and a portion of a ninth.

FIFTH TYPE.—Cups surrounded by Concentric Rings and Flexed Lines.

(See Plate I. Type 5.)

In a fifth type of the ring-cuttings, the series of circular lines, instead of abruptly ending when they approach the straight or radial groove, turn downwards at that point at nearly a right angle, and run parallel for a greater or less distance along each side of the groove line. In this class the groove line itself is sometimes double. The number of inclosing or concentric rings is generally fewer in this type than in the two last preceding types, and seldom exceeds two or three in number.

SIXTH TYPE.—Concentric Rings without a Central Cup.

(See Plate I. Type 6.)

Occasionally, but with comparative rarity, the concentric rings are formed of the various types described, but without any central cup or depression. This absence of an excavated centre has been most frequently remarked along with the complete annular type of the concentric rings which I have already spoken of in the third type. For example, on a slab-stone about twenty inches in length and in breadth, found at Great Hucklow, in the Peak of Derbyshire, and a cast of which has been kindly sent me by my friend Dr Aveling of Sheffield, there are seven concentric rings cut around a common centre; but the centre shows no cup or depression, and has a convex rather than a concave form. (See Plate XVI. fig. 2.) The diameter of the outermost ring is about twenty-two

inches.¹ Sometimes concentric circles, both with and without central cups, are found cut upon the same stone. Thus on the interior of the cover of a kist-vaen at Craigie Hill, there are carved nine groups of concentric circles. Of this number two show central cups or depressions; one is doubtful; and in the centres of the remaining six series of circles there are no cup-markings. (See Plate XV.)

SEVENTH TYPE.—Concentric Circular Lines of the Form of a Spiral or Volute. (See Plate XXV. Type 7.)

A seventh type of these lapidary markings is characterised by their cut line or lines running out from the centre in the form of a continuous spiral or volute, like a watch spring.

The carving consists of one line continued spirally outwards, with its circle expanding at each turn; instead of consisting, as the last three or four preceding types do, of a concentric and enlarging series of separate concentric lines. The spiral line usually, but not always, begins at its central extremity in a cup-like excavation.

The volute or spiral is perhaps the rarest of the forms of circular ring-cuttings in Great Britain; but this type seems common on the incised stones of Ireland and Brittany.

Co-existence of different Types.

That all these various types of cup-cuttings and ring-cuttings are intimately allied to each other, belong to the same archaic school of art, and have a community of character and origin, is proved, as already hinted, by the fact of two, three, or more of them being occasionally found carved together upon the same stones or rocks. For if, in some instances we have the sculpturing entirely of one single type or character, we have, in other instances, all, or nearly all, the types appearing in one position. Thus, on the rocks at Auchnabreach, near the Crinan Canal, there are cups both single and ringed, with all kinds of concentric circles and volutes. On the megalithic circle of stones, termed the Calder Stones, standing within a few miles of Liverpool, I lately traced

¹ The original stone is in the Museum of the Literary and Philosophical Society of Sheffield.

out all the different types,—as single and ringed cups, concentric circles of various forms, and volutes,—as shown on the sketches of them in Plate VI.

CHAPTER II.—SOME OF THE CHIEF DEVIATIONS FROM THE GENERIC TYPES.

Each of the generic types of cup and ring cuttings which I have attempted to describe is liable to present many diversities and differences of form. A brief glance at some of the principal deviations of form presented by them may enable us to take a more comprehensive view of these lapidary sculpturings.

The cup-cuttings, such as constitute our first type, rarely deviate much from the usual round form. But various occasional combinations and arrangements of them are worthy of remark. Thus two or more of them are sometimes conjoined by a straight incised line or groove. Occasionally the uniting groove is perpendicular, uniting two placed above each other, either of the same or of different sizes (Plate II. fig. 1). In other instances it is lateral (Plate II. fig. 3). I have seen an instance at Ballymenach, in Argyleshire, of a lateral or transverse groove uniting a line of five or six cups. (Plate XVII. fig. 4.) Occasionally the conjoining gutter is of an irregular branched form, connecting two or more cups (see Plate II. fig. 4 and Plate XIV. fig. 4); and more rarely two connecting grooves cross each other in a crucial form.

The uniting channel is sometimes, partly perhaps from weathering and disintegration, as deep as the cups which it unites.

In a few rare cases, two or more cups are placed in the centre of a ring-cutting, as seen in the Northumberland examples sketched in Plate II. figs. 5 and 6. More rarely, a series of small cups or stars forms a kind of beaded arrangement around the circles, as in the Jedburgh stone (Plate XVI. fig. 1). In the Pitscorthie and Letham stones, instead of an incised ring, six or seven cups at one part form a circle around a central cup (see Plate XX. fig. 1).

In specimens of the common interrupted concentric rings of the fourth type, the radial groove, instead of being single, is sometimes

double or even treble, as in a Northumberland specimen represented in Plate II. fig. 7).

A straight bisecting line, in addition to the radial groove, traverses in a few rare instances the whole ring-cutting, as seen in a specimen at Auchenbreach, figured in Plate II. fig. 8.

The radial groove is occasionally more or less zig-zagged, instead of straight, as it traverses the various concentric rings of its circle. In the fourth type everything is, in a few instances, apparently complete, and the space for an incised radial line or groove left, but it remains, as it were, uncut (Plate II. fig. 13).

Two or more of the series of concentric circles or their grooves occasionally touch and amalgamate, as in Plates XV. and XXII.; and smaller circles are seen sometimes included within the area of larger circles, as in Plate XXIV. Occasionally the fifth type assumes a kind of horse-shoe pattern, as in Plate II. fig. 9. There is an example of this kind on a rock at Calton More, in Argyleshire.

At Auchnabreach, in the same county, there are specimens of two and three volutes conjoined together. (See Plate II. fig. 10 and Plate XXII.)

In one specimen of the ring-cutting at Rowton Lynn, in Northumberland, the circumference of the outer circle has nine straight lines, diverging at nearly right angles from its circumference. (See Plate II. fig. 11.) At Auchnabreach there is another specimen of three still longer straight lines, radiating off from the outer rim of the circle. (See Plate II. fig. 12.)

In a few instances the congeries of concentric rings forms an oval, a reniform, or a pyriform, instead of a round figure. (See Plates XXI. and XXIII., &c.)

There, occur also, in some localities, along with the circular type of concentric rings, angulated and irregularly straight lines; or even lozenge-shaped concentric forms, as in Plate II. figs. 14 and 15, and Plate XIII. fig. 4, which perhaps ought to have been considered as an eighth type of these markings; and still more rarely straight and angled conjoined lines of a broken gridiron pattern appear. In some rare examples, as in castings and drawings kindly sent me by Miss Dickson from Doddington, there are angled inclosures cut around a series of circular markings

and cups (see Plate II. fig. 15). In a few instances, also, an irregular circular enclosure, in the same way, comprehends a series of cuttings; or, projecting from the circumference of a ring, it includes a number of cups and depressions, and other minor forms.

Usually the circular lines of a concentric ring are cut with great regularity, and almost mathematical precision. But not unfrequently they display no very marked accuracy of form, and unite very irregularly. In the sketch, for example, of a specimen from Auchnabreach (see Plate II. fig. 8), it will be observed that the two outer rings do not meet at corresponding points as they approach the radial grooves; and there are two or three specimens in the same locality where the series of concentric circles are so very clumsily drawn as to seem deeply indented and crushed in at one side.

CHAPTER III.—MODES OF PRODUCTION OF THE SCULPTURES; CARVED STONE SURFACES NOT PREVIOUSLY PREPARED.

Generally the sculptured lines and cup-depressions are rounded and smooth on their surfaces, as if, after their original cutting, they had been ground and polished either by art, or by time and the effects of the elements. And probably one mode of their artificial production consisted chiefly or entirely of a kind of scraped work, or of abrasion or grinding.

But a second and more constant method of sculpturing these cups and rings no doubt consisted of the use of a chisel and mallet. Evident proofs of this are seen in those specimens of the sculptures that are found inside of graves, where they have been deposited shortly after the carvings were executed, and were thus preserved in their original state from the effects of weathering and disintegration. Similar evidence of their original mode of execution can sometimes be obtained on examining the sculptures cut upon open rock surfaces, when they have happened to be long buried over with earth and soil, as in a specimen which I uncovered at Auchnabreach of a deep layer of earth or turf, which had probably overlaid for long ages the sculptures cut on the solid schist rock. The concentric rings in this instance were three in number, with a central cup and long radial groove, which extended a foot or more beyond the outer circle. The outermost ring admitted the tip of the

finger, which seemed a good measure of its width and depth. Another part of its circles, and the long groove, allowed two fingers to be placed within it; but everywhere the edges felt almost as sharp as a recently-broken piece of the same schist rock; and the rugged surfaces of the grooves and lines showed distinctly that the circles had been chisselled or chipped out.

I have not seen on our Scottish stones any decisive specimen of these sculptures that gave the idea of their occasional execution by that process of picking or punching that has long been used in some forms of stone carving and lettering. The only exception, if it be an exception, is on a stone doubtfully belonging to this class at Jedburgh, where a circle of pits or stars exist, probably produced in this way. (See Plate XVI. fig. 1.) In some Irish sculptured stones the circles are cut out in the form of dots or by punched work; and are not continuous lines.

The ancient sculptures which we are describing are all cut upon the natural and uneven surfaces of the stones or rocks on which they are found. No artificial levelling and hewing of these surfaces has been made before or at the time the figures were carved upon them. Very generally rock surfaces that are naturally and comparatively smooth have been selected for these sculptures. But often also they are cut upon undulating and broken faces of stone; and in this last case the lines of the sculpture follow continuously, without stop or interruption, over all the irregularities of the stone-surface, dipping into its sinuosities and mounting over its elevations, quite irrespectively of its heights, hollows, and other inequalities.

Frequently by exposure, and the disintegration of the rock, the cup and ring cuttings have become much faded and obliterated; and no doubt in numerous instances they have been utterly destroyed by the surface of the stones weathering and splitting off. Many old basaltic monoliths, for example, have all their surfaces so disintegrated and scaled off, that any sculpturings which perchance existed on them must have been long since erased and gnawed off by the tooth of time.

PART II.

LOCALITIES IN WHICH THE CUP AND RING SCULPTURES HAVE BEEN FOUND.

The cuttings of cups and rings described in the preceding pages have now been discovered under various circumstances, and in various positions and localities. They have been often found on stones used in connection with the burial of the archaic dead, and with various forms of ancient sepulture. They have also been detected within the underground-houses, the domestic cyclopic dwellings, and the fortified strongholds of archaic living man. Numerous examples of them have now likewise been found cut upon stones and rocks lying within and without the walls of the ancient camps or towns in which the communities of our olden forefathers dwelt. And latterly, these enigmatical carvings have been traced engraven on the surfaces of isolated stones, and of rocks *in situ*, covered over in some instances by turf and soil that has evidently been the accumulation of many long centuries. I shall adduce a few specimens of them in each of these various localities.

CHAPTER IV.—ON STONES CONNECTED WITH ARCHAIC SEPULTURE.

This is no fit place to debate the question whether the megalithic or so-called "Druidical" circles, which formerly stood in great and imposing numbers in different localities in Great Britain, and many remains of which still exist, were used by our archaic forefathers as temples for worship, or places for political assemblages, or courts of law, or places of sepulture,—or whether all of these characters and uses did not pertain to them. Various analogies and inferences from superstitious usages, &c., have been adduced; but we have no classical or other ancient and direct data left us to prove them to have been sacred fanes or courts of convention and justice. The circles themselves offer no tangible or visible evidence that can settle such questions.¹ But they usually contain within their

¹ By far the ablest defence of the sacred or temple character, &c. of our Megalithic Circles is to be found in Dr Thurnam's very learned Essay on the Historical Ethnology of Britain in the "Crania Britannica," p. 121, &c.

flat area sufficient evidence—as ascertainable by the spade and mattock—that they were used as places of human sepulture at least, whether they were used for other purposes or not. Occasionally the centres of the smaller circles contain sepulchral mounds or barrows; or, perhaps, more correctly speaking, the barrows are surrounded by a single or double circle of stones. Again, in regard to our ancient cromlechs, we have not the slightest evidence that they were ever intended for aught else than sepulchres; but we have ample evidence that they were used for this purpose, in the finding of bones, urns, and sometimes of cists, within their cavities. The same proof applies to the old chambered tumuli, which often, indeed, contain within their centres cromlech-like structures as their skeletons or nuclei. The single standing stones or monoliths of our island,—erected occasionally, we know from ancient records, for various other purposes,—were often also raised as monumental stones for the dead, as we learn from the sepulchral urns, and the human bones and ashes oftentimes found deposited at their base. The remains found in the interior of the ancient kist-vaen or stone coffin, and of the stone-covered urn, afford also incontestible evidence of their sepulchral character. And in all of those localities of ancient sepulture,—on the megalithic circle, on the cromlech, on the stones of the cairn and chambered tumulus, on the monolith, on the lid of the kist-vaen, and on the stone-covering of the mortuary urn,—cup-cuttings and ring-cuttings have been detected.

1. ON STONES OF MEGALITHIC CIRCLES.

I have had the stones of many megalithic or “Druid” circles in Scotland and England examined, with the view of ascertaining the presence or absence of cup or ring-cuttings. In most instances no marks of ancient artificial tooling or sculpturing have been traced upon the surfaces of the stones. But in several examples, both cup-markings and ring-cuttings have been detected upon them, as in the following examples:—

Circle at Rothiemay, Banffshire.—About a furlong north from the house of Rothiemay “stands a Druidical temple,” to use the language of the old Statistical Account of Scotland.¹ The circle consists of five

¹ Statistical Account of Scotland, 1797, vol. xv. p. 386.

remaining stones, the others having been removed. My friend Dr Black examined the stones for me, and found one of them distinctly marked. The marked stone is an immense oblong block thirteen feet long, six feet high, and about four in thickness. On the side of it, looking to the interior of the circle, are between fifty and sixty cups. Two of the cups are surrounded with rings. The sketch of this stone in Plate III. is accurately copied from a photograph of it. On the upper surface of the stone are also ten or twelve cup-cuttings. Upon the adjoining stone in the circle there are also four or five cups.

Circle at Thorax, Banffshire.—The circle is situated in the parish of Marnoch, Banffshire. It consists of six stones. On the inner surface of one of them, carefully copied into Plate IV. fig. 1, from a photograph, are numerous cup-cuttings; and an appearance of a ring-cutting is traceable around two or three of the largest cups. The cut stone, in this instance, as in the one at Rothiemay, is a hard granitic or syenitic rock.

*Circle at Bankhead, Banffshire.*¹—About four miles from Thorax is a stone marked with cups. It stands in the parish of Boyndie. In the new Statistical Account of Scotland it is stated that “three Druidical circles are in the parish; one near the parish church; another within a mile to the north-east; and a third on the farm at Bankhead.” Of this last circle three stones only remain, two standing and one lying. On the north side of one of the erect stones—a granite—Dr Black found twelve cup excavations of the usual size. He could not detect any similar markings on the other stones.

Circles at Bruiach, Inverness-shire.—At Bruiach, near Beaufort, stands a double circle of stones. About a dozen stones of the outer circle remain. On the upper surfaces of two of the fourteen or more stones left to form the inner circle, the Rev. Mr Joass of Edderton lately discovered markings of a few cups, and one or two connecting gutters, similar to those which his brother had discovered on other stones in that vicinity, as depicted in Plate XIV. At Bruach the inner circle is thirteen yards in diameter, and the distance between the inner and outer circle about nine feet. None of the stones are very high or large. Eight or nine measure about three feet in height, and the same in breadth.

¹ See the Spalding Club Volumes on the Antiquities of Aberdeen and Banff, vol. ii. p. 118.

Circle at Cults, Perthshire.—In the parish of Caputh there exist at Cults, within a few miles of Dunkeld, three stones,—the remains, it is alleged, of a large circle. Two of the stones are erect. The third is half prostrate. This reclining stone is nearly six feet long, and about two feet nine inches broad. Its upper surface is marked with numerous cup excavations, most of them round, a few oblong, and three sets of them joined together by intermediate grooves or gutters.

Circle at Glendevin, Perthshire.—Two or three miles from the Cult stones, and within the policy of Glendevin, is an elevated round barrow now planted with trees. A circle of several large stones formerly stood around this barrow. On the face of one of them, which still remains, I found three or four cup excavations.

Circle at Moncrieff, Perthshire.—Behind Moncrieff House, a few miles south of Perth, is a small but complete megalithic circle. The stones are apparently secondary traps. In the centre was formerly a barrow, as the partial rise in the ground still indicates. Lately bones have been found in this position. A large block, which is said to have been removed from the centre of the circle about forty years ago, and now lies a few feet outside of it, has carved upon its surface a series of cups of different sizes, as represented in the sketch of it given in Plate IV. fig. 2.

Circle at Craighall, Perthshire.—Cup excavations exist also upon an erect stone standing at a megalithic circle behind Craighall House, Blairgowrie. The cups are five or six in number, and placed in a group near the foot of the stone.

Circle of Turin, Forfarshire.—On a large erect stone which once formed one of a fine circle of boulder stones at Nether Turin, my esteemed friend Dr Wyse discovered “several carefully excavated cavities upon its top in groups, without circles.”

Circles of Graystone and Holywood, Dumfriesshire.—Dr Dixon of Dumfries has been so good as send me drawings of a stone at Graystone, the only one left of a circle that formerly existed there. Its face is marked by four small cups, which (he writes) “occur in a linear series, and are obviously artificial.” The stone is a whin. In a subsequent section I will have occasion to allude to cup-marked stones in the great Circle at Holywood, in the same neighbourhood.

Circle of Calder Stones, Lancashire.—I have already (p. 7) referred to the circle standing near Liverpool, as remarkable by presenting specimens of all the types of cup and ring cuttings. The Calder circle is about six yards in diameter. It consists of five stones, which are still upright, and one that is fallen. The stones consist of slabs and blocks of red sandstone, all different in size and shape.

The fallen stone is small, and shows nothing on its exposed side; but possibly, if turned over, some markings might be discovered on its other surface.

Of the five standing stones, the largest of the set (No. I.) is a sandstone slab between 5 and 6 feet both in height and in breadth. On its outer surface—or the surface turned to the exterior of the circle—there is a flaw above from disintegration and fracture of the stone; but the remaining portion of the surface presents between thirty and forty cup depressions, varying from 2 to $3\frac{1}{2}$ inches in diameter; and at its lowest and left hand corner is a concentric circle about a foot in diameter, consisting of four enlarging rings, but apparently without any central depression. (See Plate VI. fig. 1.)

The inner surface (Plate V. fig. 2 of this Calder stone slab (No. I.), or that surface which is directed to the interior of the circle, has, near its centre, a cup cut upon it, with the remains of one surrounding ring. On the right side of this single-ringed cup are the faded remains of a concentric circle of three rings. To the left of it there is another three-ringed circle with a central depression, but the upper segments of the rings are broken off. Above it is a double-ringed cup, with this peculiarity, that the external ring is a volute leading from the central cup, and between the outer and inner ring is a fragmentary line of apparently another volute; a double-ringed volute being common on some Irish stones, as on those at the great archaic mausoleum at New Grange, but extremely rare in Great Britain. At the base of this stone, and towards the left, are two volutes respectively of two and three turns.

The next stone, No. II. in the series, is about six feet high, and somewhat quadrangular. On one of its sides, half-way up, is a single cup-cutting; on a second side, and near its base, a volute, consisting of five turns, and seven inches and a half in breadth; and on a third side (that pointing to the interior of the circle) a concentric circle of

three rings placed half-way or more up the stone. (See Plate VI. figs. 3 and 4.)

The stone, No. III. (Plate VI. fig. 5), placed next to it in the circle, is between three and four feet in height, thick, and somewhat quadrangular, but with its angles much rounded off. On its outermost side is a triple circle, produced by a spiral line starting from a central cup. The diameter of the outermost circle of the volute is nearly ten inches. Below this figure, and on the rounded edge between it and the next surface of the stone to the left, are the imperfect and faded remains of a larger quadruple circle. On one of the two remaining sides of this stone (Plate VI. fig. 6) is a double concentric circle, of an oval form, and measuring five inches by seven. The two rings are united together by a radial groove or gutter, the only instance of the radial groove which I observed on the Calder stones.

The fourth stone (No. IV.) is too much weathered and disintegrated on the sides to present any distinct sculpturings. But it is flat on the top, and there are nine or ten cups—one large and deep (being nearly five inches in diameter); and seven or eight of these cups are irregularly tied or connected together by linear channels or cuttings.

The fifth stone is too much disfigured by modern apocryphal sharp-edged cuttings and chisellings to deserve archæological notice.¹

Circle of Salkeld, Long Meg, Cumberland.—By far the most magnificent megalithic circle in the north of England is that of Salkeld, formed of sixty-seven stones, some of them of very great size. Standing a few yards outside of the circle is a huge square-shaped monolith, formerly about eighteen feet in height, and known under the quaint name of "Long Meg." This monolith is—unlike the stones composing the circle—formed of sandstone. Three of its four sides are utterly destroyed by weathering. The fourth or east side is much more entire. Upon it Sir Gardner Wilkinson discovered a concentric circle of four rings, placed around a cupped centre. Lately I had an opportunity of

¹ The whole circle was enclosed some years ago by Mr Walker within an excellent iron railing, and the generous protection thus afforded will, it is hoped, save them for many years from farther mutilation. The day on which I visited these stones was damp and wet. On a brighter and more favourable occasion, perhaps, some additional markings might be seen.

examining this stone, and found, not one, but several series of concentric circles carved upon it, three or four of them low down on the stone, and much faded. The most entire—that discovered by Wilkinson—consists of four concentric circles, and is about ten inches in diameter; a straight radial groove or gutter runs from its third circle, outwards and upwards through the outermost ring, and onwards to the edge of the stone. This gutter does not apparently penetrate the two innermost circles. From the centre of this circle to the ground is a distance of four feet and a half. A foot lower down, and more to the middle of the stone, is a second series of four concentric rings, with a shallow cupped centre and a radial groove running from the innermost ring obliquely downwards and outwards. Still lower, and to the left, a third ring-cutting of four concentric circles, with its centre one foot nine inches high above the ground, has a sharpish radial line, most probably a natural fissure in the stone, passing from the cupped centre outwards and downwards to the edge of the monolith. A fourth ring-cutting of three concentric circles is placed immediately below this third or last group, and is connected to it by a groove or channel which runs from the centre of the concentric circles above to the edge of the group below. Alongside of it and to the right is another faded circle, apparently of three rings. Other more indistinct appearances of portions of circles are traceable higher up the stone than the circle first described, and between it and the second circle. My friend, the Rev. Mr Paterson of Melmerby, had a photograph of the stone kindly taken for me; and from this photograph the figure of Long Meg, in Plate VII., is taken. I found no traces of human art upon the surface of any of the sixty-seven stones of the Salkeld circle, except one, a large block placed on the opposite side of the circle from Long Meg, and which has the doubtful appearance of a faded circle upon its western face.

Circle at Maughanby.—Ring-cuttings have recently been found by my friend the Rev. James Simpson, vicar of Kirkby-Stephen, on two boulders, forming part of a circle of eleven stones placed around a short cist in a large cairn situated a few hundred yards to the east of Long Meg. I have seen them along with him. Two or three cairns or tumuli existed till lately in the same locality. One of them, of large size, stood on land belonging to the free school of the township of

Maughanby. After removing from its central mound or barrow a quantity of cobble stones mixed with earth, several large stones, one of them only erect, were found arranged in a circle about eighteen feet in diameter. Several of them were buried beneath the projecting edges of the barrow. In the centre of the circle was placed a semiovoid cist formed of rough stones, and measuring only three feet nine inches in length, two feet four inches in breadth, and ten inches in depth. The cist contained an urn, burnt bones, and charcoal. The only ornament upon the rude urn was a raised line near the top. No ornaments or weapons were detected, though careful search was made for them. On the inner and upper side of a large whin boulder, forming one of the eastern stones of the surrounding circle, is cut a spiral line which makes four turns or circles, the outermost having a diameter of ten inches. Alongside of it is a group of four concentric circles without any cup-centre or radial duct. The diameter of the innermost circle measures four inches, that of the outermost nineteen inches. The outermost edges of the volute and of the concentric circle touch and meet at one part. (For a drawing of this combined volute and series of concentric circles, see Plate V. fig. 1.) On the top of a second stone on the western side are two circles, both about eight inches in diameter. The lower has its centre cut out; the higher encloses within it the remains of a small central cup, with a ridge around it, as is shown in the sketch, Plate V. fig. 2.

Circle at Oatlands, Isle of Man.—Small megalithic circles, placed around a central kistvaen, like that previously described at Moncrieff, &c., seem to have constituted a not unfrequent form of sepulchre in ancient days in the Isle of Man. One of the best marked of these sepulchral mounds and circles that remains is situated at Oatlands, on the right side of the old road between Douglas and Castleton. In the centre of the mound is a stone cist, surrounded by a closely set circle of stones, seven of which are still in place. A second or outer circle is planted at the distance of some yards; and of this outer circle only four stones remain. On the outer surface of a stone belonging to the inner circle are some eighteen cup-markings, methodically arranged in five rows, as represented in Plate VIII. fig. 1. No artificial markings have been discovered on any of the other stones of this sepulchre.

2. ON STONES OF MEGALITHIC AVENUES.

Leading to some megalithic circles are planted, in a few instances, long double rows of megalithic stones, generally spoken of as alleys or avenues. The most marked instance of this arrangement in England was that which formerly existed at Abury. At Callernish, in Lewis, we have a well-known example of a Scottish megalithic circle, with its avenue, still standing.

Formerly a long avenue of this kind seems to have existed near the circle or circles at Shap, in Westmoreland. Camden, in his "*Britannia*," writing towards the end of the sixteenth century, describes the avenue at Shap as consisting of "huge stones of a pyramidal form, some of them nine feet high and four thick, standing for nearly a mile at an equal distance." In Gough's edition of Camden's "*Britannia*," published in the latter part of the last century, it is stated that within the memory of man this avenue, or "double row of immense granites," extended for about a mile through the village of Shap, but has since been "removed to clear the ground."¹ A few of the stones, however, of this Shap avenue still exist. One of them is an oblong massive block, about nine feet high and five feet broad, now half fallen, and prostrated against a bank of earth in Aspers' field. On its flattish top I measured one cup six and a half inches broad, and one inch and a half deep; and a second cup nearly three inches in breadth, three-quarters of an inch deep, with a single circle nine inches in diameter, cut around it. These cups and ring-cuttings on this Shap stone are represented on Plate XVII. fig. 4, but the outline of the stone itself is imperfectly given in the lithograph.² A second of the Shap avenue blocks stands still erect about one hundred and fifty yards south of this marked monolith, and is known under the name of the "Goggleby Stone." It is a hard, round block, about ten feet in height and eighteen in circumference. On its north side, about two and a half feet above ground, there is carved out upon it a circular disc, five inches broad, excavated but flat in the centre—the remains, I believe, not of a cup, but of a worn-out ring-cutting. I could

¹ See Gough's edition of Camden's *Britannia*, 1806, vol. iii. p. 414.

² This stone is noted as marked in Hodgson's work on Westmoreland, p. 139.

not trace any evidences of artificial tooling on any of the stones of the Shap circle placed by the side of the railway, about a mile south of the village, nor on the double circle at Gunnerkeld, two or three miles northward.

3. ON CROMLECHS.

Cromlechs, or structures consisting of a large, heavy, flat capstone, resting upon two or more upright stone props, appear to have formerly existed in considerable numbers in various parts of the British Isles. Their numbers are now much reduced.¹ The stones composing these massive archaic monuments are usually and correctly described as presenting no evidence of having been tooled and cut by man. But there are some exceptions to this general law in the appearance of incised cups and lines upon them. For instance, a remarkable example of a sculptured cromlech-stone, popularly called the "Witch's Stone," exists at Ratho, within eight or ten miles of Edinburgh.

Ratho Cromlech.—On the farm of Bonnington, about a mile beyond the village of Ratho, Mid-Lothian, are the remains of this "partially ruined cromlech" (as it was first described by Professor Daniel Wilson), with the capstone partially displaced, as if it had slid backwards upon the oblique plane of the huge stones or stone which still supports it. Two or three large blocks lie in front of the present props. Its site occupies a most commanding view of the valley of the Almond, and of the country and hills beyond. The large capstone is a block of secondary basalt or whinstone, about twelve feet long, ten in breadth, and two in thickness. Its upper surface has sculptured along its median line a long row of some twenty-two cup-cuttings; and two more cup-cuttings are placed laterally, one, half a foot to the left of the central row and at its base; the other, two feet to the right of the tenth central cup, and near the edge of the block. The largest of the cups are about three inches

¹ By far the largest and most imposing cromlech which I have seen in Scotland is the so-called "Auld Wives' Lift," at Baldernock, nine or ten miles north-west from Glasgow. It consists of three enormous sandstone blocks. Their surfaces are cut in many parts, but the carvings are all, I believe, quite modern and apocryphal. There are various smooth scalps and outcrops of rock near this cromlech, but I could trace no sculpturings upon any of them.

in diameter, and half an inch in depth; but most of them are smaller and shallower than this. Professor Wilson¹ speaks of these cups as "possibly indicating a design of splitting it [the stone] in two." But the shallowness and scooped form of the cups show that they would have been utterly incompetent to accomplish any such object in a whin block so massive, hard, and thick. The lateral cups offer strong additional evidence against any such idea. Besides, among the various concentric ring and cup carvings which I have seen at Old Bewick, in Northumberland, one huge squarish block of stone which is carved with concentric circles on its upper surface, has a row of cup-carvings cut along two of its sides exactly similar to those on this cromlech; and no one can possibly imagine that on the Northumberland rock the cup-cuttings were made with any object, but as a portion of the numerous rude ring and cup sculpturings which abound upon the upper surface and sides of this block.² (See this Bewick block and its cups and ring carvings represented in Plate XXV. figs. 1 and 2.)

Clynnog Fawr Cromlech (See Plate IX. fig. 2).—About ten or twelve miles from Caernarvon, and half a mile to the south-west of the village of Clynnog Fawr, stands near the sea a cromlech, consisting of a cap-

¹ See his "Prehistoric Annals of Scotland," vol. i. p. 95. On a very large prostrate block of Sarsen stone, lying on the left side of the avenue, and several yards to the exterior of the outermost circle of Stonehenge, there is a row of six small oblong, narrow, and deepish cavities. They are evidently artificial, and apparently made to cut off, as it were, a corner of the stone. But the cavities are too sharp in their edges and sides to be of any great age. One of the prostrate trilithons which, in falling, has broken into three pieces, has on one of its fractured surfaces a large and a small lateral cavity, with smoother surfaces already weathered out upon it.

² Since the account in the text was printed I have had an opportunity of re-examining this Ratho or Bonnington group of stones, and altogether doubt if they are the remains of a cromlech consisting of isolated and separate stones. They appear to be formed, on the contrary, of one large boulder of whin, which has partially split up. The upper layer or so-called "capstone" has cleft off by disintegration, and is slid backwards about a foot upon the earthfast masses which form its props. The largest of these props or under-masses is as broad at the "capstone," and after underlying all its eastern side, projects beyond it. The large fragments in front are fallen and separated portions of the same mass of rock. If either a heavy boulder or a mere outcrop of rock, it would resemble the sculptured projecting stones and rocks at Bewick, Rowtin Lynn, and elsewhere in Northumberland.

stone and four props. This cromlech is described, under date 1772, in the old Rhyl MSS., compiled by the Rev. J. Llwyd, of Caerwys, as having upon its capstone "near a hundred shallow cavities running in oblique but almost parallel lines along its surface, three much larger than the rest in a triangular position; it is supported by four strong bearers, and in length four cubits, in breadth three, its inclination towards the setting sun."¹ One large and two small carved or chambered cairns formerly stood near it. For the accompanying sketch (Plate IX. fig. 2) of this interesting cromlech as it exists at present, I am indebted to the great kindness of my friend, Dr Hughes of Llanwrst. The cup depressions are isolated and separated, except where some of the largest are united by a groove or gutter.

Lancrese Cromlech.—Among the numerous remains of cromlechs and sepulchral chambers which exist in the Channel Islands, none (according to Dr Lukis) show any carving or ornamental work upon them. "But," he adds, as exceptions, "in a small cromlech at Lancrese, Guernsey, there are on one of the props about fourteen circular hollows, as if they had been drilled with the intention of breaking the prop in the direction of the line of hollows. These depressions have been evidently worn with a rude muller to the depth of about one inch, and three or four inches in diameter. Only in one instance have I observed," he adds, "depressions similarly made; it is upon a menhir-like stone appertaining to the Abbey of St Michel du Valle, situated in the bourg or village of the Forest, Guernsey."² For sketches of this cupped cromlech prop, and monolith, I am beholden to the courtesy of Mr Uniacke. (See Plate X. fig. 2.)

Cromlech and Circle at Holywood, Dumfriesshire.—A few miles from Dumfries is a megalithic circle nearly eighty feet in diameter, and eleven of its massive compact stones are still left. The largest, about ten feet long and seven broad, is prostrated forward, and has upon its face, its top, and one of its sides, about thirty smooth and rounded cup excavations. At one side of the circle, and somewhat within the circuit of it, are three or four stones, which appear to me to be the prostrated remains

¹ See the *Archæologia Cambrensis* for January 1849, p. 1.

² *Journal of the British Archæological Association* for 1858, vol. iii. p. 276.

of a cromlech and its supports. The capstone has, running across its back, four oblique rows of cup-like excavations, some of them round and others irregularly elongated in form. One of the fallen props is similarly marked. It would be important to note accurately if the various strings of cups correspond in any degree with natural lines in these stones, and if, therefore, they may possibly have a natural origin; or if they are arranged quite independently of the mineralogical peculiarities of the blocks, and are hence, as they seem to be, the results of artificial tooling.

Rathkenny, Meath.—The cromlech markings which I have hitherto spoken of consist only of cups or excavations. An instance of a cromlech carved both with cups and circles has lately been discovered at Rathkenny, near Slane, in Ireland, by Mr Conwell of Trim; and I hope he will soon himself publish a full account of it. In the meantime, he has kindly favoured me with a sketch of the upper surface of the capstone. From this sketch the cups or depressions, whether natural or artificial, seem to be above a hundred in number, and are intermixed with straight lines or scores running in diverse directions. The capstone is about ten feet long, and six feet broad. On its under surface are "seven separate circles; and seven other circles of varying size are cut on the upright stone or prop upon which it leans, at an angle of 32°."

In Great Britain, perhaps the most celebrated cromlech is that known as Kits Coty House, near Maidstone, in Kent. On visiting it some time ago when professionally in that neighbourhood, I found the huge capstone completely perforated or "holed" on one of its projecting sides, like some of the "holed" cromlech stones in Yorkshire¹ and Cornwall, in France, Algeria, Circassia, and India.²

¹ See Rooke in the *Archæologia*, vol. viii. p. 209.

² See Mr Brash on "Holed Stones" in the "Gentleman's Magazine" for December 1864, where a number of instances are collected. As examples of holed cromlech-stones additional to those mentioned by Mr Brash, I may refer to the model in the British Museum of one that formerly stood at Trevethy in Cornwall (see Norden's "Cornwall"); and to the holed prop of the cromlech at Trie in France, described and figured by Carro ("Voyage chez les Celts"). Bertrand, in a late essay upon the "Monuments Primitifs de la Gaule" incidentally states, that in perhaps a dozen of cromlechs ("*dolmens*") in France there are "holes" ("*trous*") "in the supports." The capstone of a cromlech at Oulad Mohammed in the African province of Constantin

This capstone and its three supports are further scooped out in various parts by cup-like hollows, for the most part shallow, but some of them passing deeply into the stone. The outer or exposed face of the eastmost of the three props shows about fifty such round, smoothed excavations, two inches and upwards in diameter. Their irregular distribution, and the occasional obliquity and depth of their orifices, seemed to me to prove that they were the work of nature rather than of art. They are comparatively wanting, however, on the exposed edges of the blocks; and they exist, in some instances, on the protected interior aspects of the stones of this cromlech. One on the inferior and protected surface of the capstone penetrates upwards some eight or ten inches into its substance. The stones themselves are extremely hard blocks of limestone grit. It would be interesting to observe whether that rock *in situ*, where it had been long exposed to the action of the elements, weathered into any similar forms. They might, it must further be remembered, have been weathered blocks even before being used in the construction of the cromlech; and possibly they, and some similar stones, are originally hardened lapidary nuclei, left as relics and waifs out of geological superficial strata, the softer materials of which have all been long ago washed away by the action of water and time.

In a paper by Dr Lukis, in the "Archæologia,"¹ on Ancient Celtic Lapidary Remains, the author incidentally refers to traces of human chiselling upon cromlechs in the district of Dyffryn, North Wales—a region rich in antiquities. The reference is specially, I believe, to a cromlech called Arthur's Quoit, near Llanddwywe, Merionethshire. There is a second and larger cromlech within a few feet of it, and numerous cairns in the immediate neighbourhood. One of the supports of Arthur's Quoit has

was found "holed" by M. Feraud ("Revue Archæologique" for March 1865). Lately Captain Meadows Taylor has shown that a form of cromlech or external kistvaen, "holed" in one of its props or sides, is very common in the Dekkan of India. In the district of Bellary alone he alludes to 2129 cromlechs and kistvaens, 583 of which have "slabs on four sides, roof slab, and one side perforated by a circular hole;" and 527 as presenting no top or covering slab, but composed of four sides, and one of these sides "pierced with a circular aperture." (Trans. of R. Irish Academy, vol. xxiv.)

¹ See Archæologia, vol. xxxv. p. 250.

the heavy capstone resting merely on its edge; and the remainder of the summit of this prop-stone is flat, but weathered and broken off at two sides. The free and uncovered flat top of the support presents a surface of about eighteen by twelve inches, and it has eight or nine very slightly curved, parallel, deepish lines run obliquely yet fully across it. These lines, if artificial, are quite different in form from any described in this essay. The sepulchral character of these two cromlechs—and consequently of cromlechs in general—is strongly shown by their interiors still containing short stone cists about four feet long and three feet high.

4. ON THE STONES OF CHAMBERED TUMULI.

Many of the chambered tumuli and cairns which the ravages of time have spared us, have been diligently ransacked in search of their osseous and other contents; but the stones composing them have in very few instances been examined with the view of tracing any human tooling or sculpturing upon their surfaces. Perhaps a more extended search in this direction will yet be followed by success, as the following examples tend to show:—

Clava, Inverness-shire.—One of the most remarkable archaic cemeteries or cities of the dead in Scotland, is well known to be that of Clava, near Culloden. It is now much destroyed and dilapidated. Several cairns, however, and chambered sepulchres, still remain more or less entire, and have been described and figured by Professor Innes in the Proceedings of this Society (vol. iii. p. 47, Plates VI. and VII.) My friend, Dr Grigor of Nairn, has examined the chambered tumuli for me. He has found cup-markings on some of the stones in two or three of the Clava sepulchral chambers. Thus in Plate X. are represented, at figs. 1 and 2, the circles of supporting stones forming the walls of two of these chambers, and the entrances leading to them. The two stones painted dark in these sketches, both present, on their interior surfaces, cup excavations, as represented in figs. 3 and 4 of the same Plate.

As an instance of both cups and concentric circles found on the stones of chambered sepulchres in England, let me cite the observations

of Mr Tissiman of Scarborough, published in the "Archæologia" for 1851.

Cloughton Moor, Yorkshire.—On Cloughton Moor, near Scarborough, are the remains of a so-called "Druidical circle" and some sepulchral cairns. Within the area of the megalithic circle are the remains apparently of one side of a vault or chamber, "near which was found" a stone with cup excavations or "pecked holes." The figure of this "pecked" stone is copied into Plate XI. fig. 4. "In very numerous openings of tumuli," observes Mr Tissiman, "I have often found stones with pecked holes, varying in number of holes and sizes, and in most instances immediately surrounding the interments." At Ravenhill he met with a vault or cist, with four concentric circles incised on one of its end stones, as shown in Plate XI. fig. 3; and he represents two other slabs, "part of the sepulchral chamber of a cairn," covered over with cups and grooved concentric circles.¹ Copies of these figures are given in Plate XI. figs. 1 and 2; and an urn found in the tumulus is represented in fig. 5 of the same plate. The Museum at Scarborough contains, I am told, other cupped stones from the same locality.

I shall have to refer in the sequel to the existence of cups and circles, as well as of far more elaborate carvings upon the interior of some of the chambered tumuli of Ireland and Brittany.

5. ON STONE CISTS AND STONE COVERS OF URNS.

The first instance in which the concentric ring-cuttings seem to have been made a subject of special observation, referred to specimens of these carvings upon the stones of an ancient kistvaen or stone coffin. This stone coffin was dug in a gravel pit upon the classic land of

Coilsfield, Ayrshire.—In 1785, Colonel Montgomery, afterwards ninth Earl of Eglinton, sent a drawing of the cover of the kistvaen and enclosed urn to the Royal Society of Edinburgh. The cist cover was about five feet in length and two and a half in breadth. Internally, it

¹ See the Archæologia, vol. xxiv. p. 446. Mr Greenwell informs me that in a tumulus at Way Hag, near Hackness, a few miles from Cloughton Moor, slabs were found, showing several groups upon them of concentric circles, provided with the usual cup centres and radial ducts.

had cut upon it a series of concentric circles, consisting of six rings placed around a central cup, the rings traversed by a straight radial groove. On the drawing are marks of other cups and rings, or rather volutes, and a number of angular lines. Unfortunately, a variety of inquiries which I have made after this interesting stone, shows that it has been lost now for many years, and that it is therefore impossible to correct the rough original drawing of it, copied into Plate XIII. fig. 1. This sculptured stone covered an urn of the pattern given in the same Plate, fig. 2.¹

Craigie Hall, Edinburgh.—About forty years ago, when a new road was cut through Craigie Wood, eight miles from Edinburgh, the end of a stone cist was left exposed. It lay about three feet below the surface of the soil, and long remained there projecting out of the side of the cut, and overhanging the road by eight or ten feet, as seen represented in a sketch made several years ago for me by my friend Mr Drummond, and copied into Plate XV. The breadth of the cist was thirty inches, and its depth eighteen inches. Latterly its length was under three feet, but a part had been broken off. From the removal and disintegration of the earth around this sandstone kistvaen, it threatened to fall; and the proprietor of the ground, Mr Hope Vere, has latterly removed the stones, and carefully preserves them. The cist consisted of two lateral stones and apparently two end stones, with a covering slab which is about three feet broad, and now only about four feet long. The interior of this slab is carved with nine or ten groups of concentric circles; and formerly one or two more sets existed in portions of the stone that were broken off. Of these circles some have, and others have not, a central cup, as represented in Plate XV. fig. 2. The diameter of the largest circle is about ten inches; the smaller do not exceed four or five inches. As usual, the circles are carved on the rough unprepared surface of the stone, and follow into its sinuosities and depressions. This sepulchral cist seems to have contained an "urn;" if we interpret aright the irreverent observation of one of the workmen still alive, who states that, on opening it, they found within it "an auld can."

Caerlowrie, Edinburghshire.—On the low ground, about a mile southwest of the kistvaen on Craigie Hill, my friend, Mr Hutchison, has

¹ See Dr Wilson's Prehistoric Annals, vol. i. p. 480.

lately found within his policy at Caerlowrie a short cist, with the interior of the covering stone marked with three series at least of concentric circles. The grave was so near the surface, that the carved stone had been much broken by the plough. The cist was composed of rude, unmarked freestone slabs; but without a stone bottom. It contained a stratum of unctuous, black, fatty earth, with traces of decomposed softened bones, and one or two human teeth. The widest diameters of the sets of rings cut on the inside of the lid is about five inches, and each set is composed of five concentric circles.

Bakerhill, Ross-shire.—At Bakerhill, on the estate of Brahan, and about two miles west of Dingwall, during the trenching of some uncultivated land, a cist-like structure was met with, consisting of slabs set on edge, and covered by an overlying schist stone, four feet in length, two and a half feet in breadth, and six to eight inches in thickness. One of its sides is marked by above thirty isolated cups, and by several sets conjoined together in groups of two or more by connecting grooves or gutters. Six or seven of the cups are surrounded by a circle, usually imperfect or wanting at one point or side. See Plate XIV. fig. 1. This stone was discovered on the roadside, some time ago, by Mr Joass of Dingwall, and its history traced by him. I am indebted to his courtesy for these particulars, and for a sketch of the sculptures.

Carnban, Argyleshire.—Carnban, or the White Cairn, is a village and station on the line of the Crinan Canal. It derives its name from a large cairn which formerly stood in the field opposite to the present Inn, but the stones of which have now been almost entirely removed. Placed on the rock, and at the base of the cairn, was found, and still exists, a stone cist. Dr Hunter of Lochgilphead, and Mr Richardson Smith of Auchnaba, opened and cleared it some years ago, and found a schist slab,—slid in as an upright loose panel,—and resting against the stone forming the western end of the grave. This moveable panel is twenty-five inches long, eighteen broad, and two and a half in thickness. It has cut on one surface a series of five concentric lines, and the commencement of a sixth, not of a round, but of a lozenge or quadrangular form (see a sketch of the carving in Plate XIII. fig. 4). The sculpture is seventeen inches long by fifteen broad. It is not placed centrally on the slab; and portions of its outermost parts have been broken off,

apparently to reduce and fit the slab to the size of the cist. There is an appearance of a central depression, and of a straight bisecting line passing through the middle of the lozenged lines. This panel was presented by Mr Smith to the Edinburgh Antiquarian Museum. When discovered, its cut surface was directed to the interior of the grave. I had, some time ago, an opportunity of re-opening the cist with Dr Hunter. We could find no markings on any of the other stones composing it. Its bottom was formed by the solid rock, and its sides, ends, and lid, each of separate slabs. The cist is short, being only four feet in length. It is one foot ten inches wide, and about two feet two inches in depth. The covering stone or lid is a large heavy slab five feet and a half in length, and two and a half feet in breadth. When the cist was first opened there was found within it yellow sand with some black charcoal and several burnt bones lying upon its bottom. Some flint fragments have, I believe, been discovered in a later search. Stone hatchets, and forty or fifty large chipped flints, were found some time ago in the moss of the Hill of Craighlas, immediately opposite to Carnban.

High Auchinlary, Wigtonshire.—On the farm of High Auchinlary, in the parish of Anwoth, are six standing stones, apparently the remains of a “Druidical circle.” Some years ago, on this farm, there was turned up by the plough, when trenching a piece of waste land, a slab presenting on one side a variety of concentric linear cuttings, as represented in Plate XIII. fig. 3. One of these sculptures is a grooved concentric circle of six rings. Other cuttings are of the fourth type in one series, and one presents a series of circular dots or cups between two of its rings. Mr Stuart, who has figured this slab in his great work on the “Sculptured Stones of Scotland,” compares it to the cist-cover at Coilsfield, &c. Unfortunately the exact relations of this Auchinlary slab to any cist or other stones do not seem to have been ascertained at the time of its discovery.

Forfarshire.—A slab marked with several concentric and single circles and deep cups, united by radial lines, one of which assumes an unusual zigzag form, was some years ago found at Walltown, Forfarshire,¹ and a drawing of it has been obligingly made for me by an excellent antiquary,

¹ Attached to a pencil sketch of this Walltown slab shown me by Mr Stuart is a note written by Dr Hibbert, about 1827, as follows :—“Part of stone at Walltown, near Forfar ; the other part said to remain in the ground at St Peter’s Well.”

the Rev. Mr Shaw of Forfar. It belongs to this same category of doubtful cist-stones or covers. It was found in a locality where numerous sepulchral remains exist. See a figure of it in Plate XIII. fig. 5.

In England stone urn covers have been repeatedly found carved with concentric rings, and especially in

Northumberland.—Several examples have been discovered in Northumberland principally by the Rev. Mr Greenwell, of the cutting of cups and concentric circles upon stones covering cists or the mouths of sepulchral urns and pits. Instances of this kind have in particular been found at Black Heddon, and Ford West Field. One of the urn slabs in this last locality was cut on its under surface with three incomplete concentric rings on its inferior surface (see Plate XV. fig. 3); another showed only cup excavations. Six or eight similar urn covers were quite unmarked. All of them, both the marked and unmarked, covered small sepulchral pits dug in the soil. Two of those discovered by Mr Bigg at Black Heddon were apparently the coverings of urns placed in tumuli. In all cases, I believe, in which these sculptured cist or urn covers have been found in Northumberland, the accompanying bones and urns indicate cremation.

Dorsetshire.—In his antiquarian researches in this county, Mr Warne opened, at Camedown on the Ridgeway, a tumulus of rather an unusual form. At its base, when reached, were found the remains of six unburnt human skeletons, placed without order or regularity, and some few bones of the ox. Above them, and in the centre of the tumulus, was built up a cairn or heap of flints around a coarse and broken urn, which contained calcined bones. This mass of flints was surrounded and covered by a horizontal rough slab. Above and upon this slab was built another large heap of flints, six or seven feet in thickness. This second heap was capped with another rough slab, lying two or three feet below the surface of the tumulus. Both these flat unhewn covering slabs had a group of concentric circles cut upon them. Fig. 1 in Plate XII. represents a section of the tumulus, and fig. 2 gives a sketch of the circles on one of the stones.¹

¹ For a copy of these sketches I am indebted to the courtesy of Mr Warne. They form part of a forthcoming volume by him on the Antiquities of Dorsetshire. Some account of this tumulus is published in the Journal of the Archæological Association, vol. iii. p. 51.

6. ON STANDING STONES OR MONOLITHS.

Large unhewn standing-stones, stone columns, obelisks, monoliths, or menhirs, abound in different parts of Scotland, sometimes standing alone, more rarely placed in groups or lines. They were, as already stated, raised with various objects. One of these objects was, as we know from the urns and bones near their base, as a memorial of the dead.

"Of single memorial stones," says Professor Wilson, "examples might be cited in nearly every Scottish parish; nor are they wanting even in the Lothians, and in the immediate vicinity of Edinburgh, where the presence of a busy population, and the unsparing operations of the agriculturist, have done so much to obliterate the traces of older generations. But nearly all are of the same character, differing in nothing but relative size, and the varying outlines of their unhewn masses. They have outlived the traditions of their rearers, and no inscription preserves to us the long-forgotten name."¹ In every district of North Britain, according to George Chalmers,² these stone pillars are to be found "in their natural shape, *without the mark of any tool.*"

This last observation certainly holds good with regard to most of the Scottish standing-stones. But latterly, since studying the subject of lapidary cup and ring cuttings, I have found these archaic tool-marks on no small number of our ancient monoliths; and the surfaces of some of the stones have become far too broken and disintegrated to show them now, if ever they did exist on them. In his "Prehistoric Annals," Dr Wilson gives figures of two monoliths standing in the Lothians,—namely, the Caiy stone within a few miles of Edinburgh, and a tall monolith near Dunbar. Markings were only lately detected on them when they were specially examined for that purpose.

Caiy Stone near Edinburgh.—The Caiy stone, in the parish of Colinton, about three miles south-west of Edinburgh, is a massive, unhewn, flattened sandstone obelisk, standing about ten feet high. Its surface is much weathered, but near its base there are still distinctly marked the remains of seven cup excavations of the usual form, and arranged in a row like those on the cromlech at Bonnington, some six or seven miles

¹ Wilson's Prehistoric Annals of Scotland, 2d edition, vol i. p. 130.

² Chalmers's Caledonia, vol. i. p. 87.

distant. The sketch of these cups on the Caiy stone, given in Plate XVII. fig. 1, is from the able pencil of Colonel Forbes-Leslie. There are other more dubious and lesser excavations placed higher up. "On digging," observes Professor Daniel Wilson, "in the neighbourhood of this primitive monument, a quantity of human bones were found."¹

Monolith at Dunbar.—When speaking of the great memorial stones which still survive in dumb forgetfulness in many a populous centre of the low country, Dr Wilson gives a masterly sketch by Mr Drummond² of, to use his own words, "one such fine monolith which stands in massive rudeness in the vicinity of Dunbar. In a neighbouring field," he adds, "a number of rude cists, containing sepulchral urns, were dug up in the early part of the present century."³ When Mr Drummond originally sketched this stone, he did not observe any cup excavations upon it. But lately he has furnished me with a new drawing of the monolith, copied into Plate IV. fig. 3, taken by a friend, and showing five cup markings upon one face of the stone.⁴

I have notes of similar cup markings upon other Scottish monoliths, as in Fifeshire, at Pitcorthy and Torrie; in Stirlingshire, at Ruehill, near Doune; in Perthshire, at Belmont Castle; in Wigtonshire, on a standing stone at Whirlpool, in the parish of Stoneykirk; in Cantyre, on a monolith near Campbelltown, &c.; and no doubt many others exist; and many others which formerly existed, cut both with cups and rings, are now lost and destroyed.⁵ By far the most interesting specimens

¹ Prehistoric Annals of Scotland, vol. i. p. 137.

² See the stone represented in Mr Drummond's interesting paper on Stone Crosses, in the Proceedings of the Society of Antiquaries of Scotland, vol. iv. p. 87.

³ See his Prehistoric Annals, vol. i. p. 125.

⁴ Four large obelisks stand within a few miles of Dunbar, viz., one at Kirklandhill, a second at Markle, and two on Standingstone farm, near Dunpender. None of them have any markings upon their present surfaces; but they are all much weathered.

⁵ As an illustration of this remark, let me adduce a notice of a monolith in Galloway which Andrew Simson alludes to in his history of that district, written towards the end of the seventeenth century. In Camerot Muir, in the old parish of Kirkdale, there is, says he, a stone four or five feet in diameter, called the Penny Stone, which "hath upon it the resemblance of that draught which is commonly called the walls of Troy," viz., a volute or spiral. (See Mr Nicolson's History of Galloway, vol. ii. p. 47.) It is stated in the last Statistical Account that this stone has disappeared.

which I have myself happened to see are in the vicinity of Kilmartin, in Argyleshire, at a short distance from the western end of the Crinan Canal.

The village of Kilmartin is situated upon a rising ground, and commands a striking view of the valley of the Add and of the mountains beyond. Its interesting and antique churchyard is—like some others in Argyleshire—full of sepulchral slabs and tombs, covered with rich olden floriated and figure carvings. But, stretching out for a course of three or four miles below it, is a scattered archaic necropolis of immensely older date,—and having spread over it, at various distances, single and grouped monoliths and megalithic circles, cairns and barrows, chambered tumuli, stone cists, &c. Some of the monoliths show no decided evidence of tooling upon them. But amongst the extant groups of ancient obelisks at Nether Largie, Ballymenach, &c., several of the stones are strongly carved, and hence require more notice from us here.

Largie, Argyleshire.—Along the low ground, from Kilmartin to the farm of Largie, runs a string or succession of large cairns or barrows, terminated by a group of six or seven tall monoliths, planted very irregularly—six of them in pairs. One of these obelisks, about nine feet high, and three and a-half broad, presents on its flat eastern side a series of above twenty cup-markings. This stone is represented in Plate XVII. fig. 2. Two of the cups are each surrounded by a deep and smooth ring. The largest of these circles is from six to seven inches in diameter, and its central cup three inches broad. One of these ringed cups has a groove or gutter traversing its circle, and running downwards into a second cup placed a few inches below. The base of this monolith is surrounded by a circlet of stones placed on edge. The ring-markings upon it were first discovered by the Rev. Mr Mapleton, to whose extreme courtesy I—and other antiquarian visitors to the district—feel most deeply indebted. One of the other Largie stones has an appearance of three cup excavations upon it. With this exception no other tool-markings

In the *Archæologia*, vol. v. p. 315, &c., there was published in the last century an account of several megalithic circles at Achencorthie in Kincardineshire, and two stones are alluded to having each a cup and channel leading out from it. These circles have latterly become much destroyed, and some friends have searched in vain for me for those described as cupped and channelled.

seem to exist on the Largie obelisks; nor on the thirteen upright stones which form the remains of a megalithic circle, fourteen or fifteen paces in diameter, standing on the opposite side of the road, and surrounding a stone cist, five feet long and two feet nine in breadth. In the adjoining field are the remains of a large cairn containing several sepulchral chambers; but no apparent markings exist upon any of the huge stones composing the walls of these chambers.

Ballymenach, Argyleshire.—Proceeding along the valley from the Largie group of monoliths, we pass on the left a cairn in a wood, with one or two large chambers or cists already opened within it; and about a mile beyond the Largie stones, we come upon another still more stately and imposing cluster of seven pillar-stones standing on the farm of Ballymenach, in the parish of Kilmichael-Glassary. The field containing them is skirted at two sides by woods, which have been found the seat of isolated stone cists. In the field itself are placed the levelled remains of two barrows or cairns, and a small closed circle of stones, the circle measuring only six paces across, and the stones being about three feet in height. Thirty or forty paces behind this circle stand arranged in a straight row the four tallest monoliths, looking nearly directly east; about forty paces further back are a pair of the stones placed side by side, and parallel with the first row; and some twenty paces still further back, but obliquely, and somewhat to the left, the remaining seventh pillar-stone is situated. In Plate XVII. fig. 1 is represented this group of seven stones, with the small stone circle placed in front of them.

Four of the seven Ballymenach monoliths show no appearances of artificial cutting upon their surfaces; the most southerly in the first row presenting no markings, though it is the most stately in the whole group, overtopping them all by two or three feet. Three of them are more or less carved—two on the eastern, and one on the western side of the stone or slab.

The two stones principally carved are the two innermost of the first row of four. The most southerly of these two is a huge slab above twelve feet in height and six in breadth. To trace all its markings, Dr Hunter and I were obliged to clear portions of its surface of accumulated moss. Its eastern face shows about forty cup excavations. Five

of the cups are surrounded each with a deep circle or ring, and near the top is a sixth appearance of a ring without any central cup. The circles are from seven to nine inches in diameter. The central cup of the largest is nine inches broad and about two and a half in depth. Four of these cup and ring cuttings show the common radial groove passing through the circle. The western face of this stone does not present any markings. In Plate XVII. fig. 2, is a representation from a careful sketch, kindly drawn for me by Mr H. D. Graham, of the eastern surface of the stone, showing the appearances I allude to. The opposite or western surface of the next stone in the row has about forty cup markings upon it. Three of the cups are surrounded by rings with a traversing radial gutter. Six of the cups are tied together by a continuous grooved line. The carvings on this stone are represented in Plate XVII. fig. 3. The isolated monolith is the only other one exhibiting any markings. It is above nine feet in height, and its eastern face shows eighteen cup excavations. (See the sketch of it in Plate XVIII. fig. 3.) In addition, it is a specimen of a so-called "holed stone;" for between two and three feet above its base it is completely perforated.¹ The opening which is represented in the sketch is much splayed on either side. At its centre it is about three inches wide; and externally

¹ The stone at Torrie, Fifeshire, alluded to at p. 31, is a flattened sandstone flag, deeply guttered in longitudinal lines, and presenting cup-markings on its eastern side. It has been attempted to be made "a *holed* stone," like this block at Ballymenach, but the artificially splayed perforations from the opposite sides do not meet in the middle. About fifty paces from it are the remains of a small circle of stones. Let me here add, what I ought to have noted before (p. 25), that two of the stones at Stonehenge are "holed;" no doubt merely by weathering and disintegration. One of the holed stones is the first upright stone in the avenue at Stonehenge; the perforation is very irregular in shape, and traverses obliquely its south-east angle. The second holed stone is one composing the first upright trilithon on the right side of the circle. It has a deep longitudinal perforation in its back; and below this perforation there is, to use the old description of Dr Stukely, "a cavity in which two or three persons may sit, worn by the weather." (See his "Stonehenge," 1740, p. 29.) In his "Abury" (1743) he describes a perforated stone standing outside the southern interior circle, which has, he states, "a hole in it, and probably was designed to fasten the victim in order for slaying it. This I call the Ring Stone," p. 25. I did not observe this holed stone in visiting Abury; but the Rev. Mr Ross, late rector of Abury, tells me that it still remains.

it is seven inches in diameter on the east side and four on the west. There are no cups nor rings on the eastern side of this stone.

Passing along the road from Kilmartin to Lochgilphead, we come, about a mile or less beyond Ballymenach, to a field lying between the road and the farm of Dunadd, where stands a very broad and tall monolith. At the distance of half a mile or so beyond this point is the new village of Kilmichael-Glassary. On the western side of the village, and on the banks of the river Add, are placed, on the farm of Dunamuk, first, three stately stones, of about nine or ten feet each in height, arranged originally in a straight row as a trilith, but the middle stone is now prostrate; then a quarter of a mile higher up the stream there stands together a pair of still taller monoliths; and lastly, in the field above this erect pair, and on the higher ground, are two great prostrate pillars, with the remains of three large cairns—one of them within a few feet of the fallen monoliths. There are stones also showing the remains of three circles and cairns in the adjoining and lower field, but their true appearances have lately been destroyed by blasting them with gunpowder. On examining the surfaces of these various monoliths, I could only trace on one of them—namely, the easternmost of the tall standing pair—one circular cup depression of the usual form, and near it an elongated smoothed oval cavity, measuring about six inches in length and one and a-half in breadth and depth.

My friend Mr J. MacGow Crom has lately examined for me other standing stones near Kilmartin, as two on the road to Ford, and one at Lechguary to the northward of Kilmartin, twelve feet high,—all of them unmarked. But about a mile or more above the village of Kilmichael-Glassary he found a carved stone above ten feet high, at a place bearing the name of “Tor-a-Vlaarin” or “The Mound of the Battles.” The stone was “half buried in the earth, and almost all its marks were placed low down below ground.” These marks consist of several cup excavations on the north and south sides of the stone; and one of them on the north side is surrounded by a circle, like the ringed cups on the Largie and Ballymenach stones, and has also, like them, a radial duct or groove traversing it.

I have examined two monoliths placed on the low ground below Auchnabreach, and hence a mile or more further down the valley of the

Crinan Canal than Dunamuk; but I could discover no markings or cuttings on them. One of them, which is now prostrate, was found, it is said, to have evidence of sepulture near its base.

There has been already described and figured the panel (see Plate XIII. fig. 4), with angulated concentric carvings, taken from the barrow at Carnban, about a mile or so nearer Kilmartin.

We shall see subsequently that several rocks *in situ* on the sides of the Crinan Valley, and in the vicinity of this archaic cemetery—running from Kilmartin to Auchnabreach—are cut with numerous groups of concentric circles and cups.

Hence in this limited district we have specimens of rings and cups cut upon the surfaces of solid rocks, upon monoliths, and upon cist-stones; and the specimens already discovered amount, I believe, to upwards of two hundred in number, in a locality about five or six miles in length and a mile or two in breadth.

In England the most striking and magnificent group of monoliths that I have seen are the so-called “Devil’s Arrows” at Borough Bridge, in Yorkshire. Three only of these tall and enormous monoliths are now left, and stand in a line about a stone’s throw from each other. They are all pillars of a squarish shape, and said to be formed of millstone grit. Each at its upper part is deeply and vertically guttered, apparently by long weathering and exposure; and their lower portions show round, smooth, cup-like excavations upon some of their surfaces. The most northerly of these imposing monoliths is especially marked in this last way. Many, if not all, of these excavations, have probably been effected by the elements and weather; while some of them, which look more artificial, are of the same shape and form as those on the Kilmartin stones, &c. But unfortunately we have not here the presence of rings or circles around the cups to determine conclusively their artificial character.

CHAPTER V.—ON STONES CONNECTED WITH ARCHAIC HABITATION.

Hitherto we have spoken of these rude ring and cup carvings as seen

on stones, all of them probably connected with the sepulture of the archaic dead. But the same strange and curious markings have been found connected with the dwellings of archaic living man,—as in the dwellings and forts which he occupied, and within or near his ancient towns and camps. I shall proceed to adduce a few examples in illustration of this remark.

7. IN UNDERGROUND HOUSES, &c.

Among the oldest forms of primitive domestic architecture of which we have the remains in Scotland, are those rude and dark subterranean, or semi-subterranean dwellings which are known under the names of “Earth Houses,” “Picts’ Houses,” “Weems,” &c. These cave-like dwellings are usually built with rough cyclopic walls of large stones, and roofed over by flat flags and a covering of earth and soil. Some of their component stones have been found marked with circles and cups; as at

Eday, Orkney.—There is in the Museum of the Antiquarian Society a stone from the island of Eday, Orkney, marked with two sets of triple concentric circles, each having a cupped centre; and a faded portion of a third set. There is also a double spiral cutting of several circles; and the outer spiral line of one volute crosses and makes a junction with the outermost spiral line of the other volute. The stone was discovered in Eday a few years ago, in a large pile of ruins which had once formed a so-called “Pict’s house.” The building, according to Mr Hebden—who presented the stone to the Museum—was about forty yards long and ten broad. The incised slab is of sandstone, and is three and a-half feet long, fifteen inches broad, and eight inches in thickness. (For a representation of the cuttings on it, see Plate XIX. fig. 4.)¹

Holm of Papa Westray, Orkney.—In 1849, in examining a Pict’s house in the Holm of Papa Westray, my friend, Captain Thomas, found on a stone—built into the wall near the entrance—a neatly engraved circle about four inches in diameter, and two other small conjoined circles on another stone in the building. Mr Petrie has more lately detected on other stones in this subterranean building other circular and linear markings, which,

¹ Proceedings of the Society of Antiquaries of Scotland, vol. iv. p. 185.

he says, "it is easy to see have been formed by a pointed instrument tolerably sharp."¹

Pickaquoy, Orkney.—In 1853, Mr Farrer excavated a built subterranean structure in Pickaquoy, near Kirkwall. The building was so dilapidated that it was difficult to trace whether it was a grave for the ancient dead or a house for the ancient living. Mr Petrie, a most excellent judge on such a question, thinks that it was an archaic dwelling-house. In one of the chambers a stone with a central cup and a group of concentric circles engraved on it was found built upright into the wall. The appearance of the circles upon this stone is copied into Plate XIX. fig. 5. Another long slab was found with thirteen small cavities along one of its edges, and a larger cup or cavity in the centre of one of its sides. "When," remarks Mr Petrie, "a short time afterwards I examined the engraved circles, and especially the cavities cut in the stones in the walls of the Pict's house at Papa Westray, the similarity was so striking that it required no stretch of imagination to suppose that the same instrument chiselled the figures in both places."²

Frith, Orkney.—Mr Petrie has found an elongated stone sculptured on one end in a ruined wall in the parish of Frith. The sculpturing consists of a volute or spiral line making four turns. The diameter of the outermost circle is above six inches. See it drawn in Plate XIX. fig 6. I allude to this stone here, chiefly as forming one of the Orkney group; and partly because it had been used in building, though not apparently in the construction of a Pict's house. The ruined wall, in the base of which it was discovered, stood at an ancient broch or burg at Redland, where it turned up in some diggings conducted by Mr Farrer. But this was possibly not the original site of the stone; for it seems to have been used casually for building material. The stone itself is now in the Antiquarian Museum, Edinburgh.

We do not know the age at which the "weems" or underground houses were used by our Scottish forefathers; but there are one or two pieces of evidence which go far to prove that the carving of cups and

¹ See notices and figures of these carvings, in the Proceedings of the Society of Antiquaries of Scotland, vol. ii. p. 61.

² Proceedings of the Society of Antiquaries of Scotland, vol. ii. p. 61.

circles upon large stones existed apparently before these underground houses were built, as in the following instance in a Pict's house at

Letham Grange, Forfarshire.—Several years ago the stones forming a Pict's house built into the banks of the river Brothick, near Letham Grange, were removed for building purposes. Some of the foundation stones of the walls were left. Lately, on removing these foundation stones, one was found carved on both sides with cups and circles, and has been kindly presented to the Museum of the Society by Mr Hey of Letham Grange. It is a sandstone block measuring three feet nine inches in length, three in breadth, and one in thickness. Both sides are very rough and broken, and in this uneven condition have had chiselled upon them the cups and circles, single and double, which they contain. See Plate XX. figs. 1 and 2. One side of this sandstone block has carved upon it some forty cups. Most of these cups are isolated; but some are connected together by intervening ducts or gutters. The two largest and deepest are surrounded each with two encircling rings traversed by the usual radial groove. Several cups have one surrounding ring. At the upper and right hand corner a centre cup is surrounded by a circle of seven cups. Two of these cups are themselves ringed. On the opposite side of the block are carved fourteen or fifteen cups; three of them surrounded by a single guttered or incomplete circle; and seven of them encircled with two rings each, with the usual radial duct traversing them.

The original underground house, of which this sculptured block had been used as one of the foundation stones, was a structure about six feet in diameter, and six feet in height. It was built into the side of a gravelly bank or ridge. The masonry was of the rudest description. The floor of the house was only a foot or two above the level of the Brothick. The sculptured foundation stone was built—the Rev. Mr Duke of Arbroath writes me—“into the base course of the south wall, with the most deeply marked side facing the interior. Of course, as the whole building was originally under ground, the other side of the stone on which there were also ring markings was embedded and hidden in the soil. It is thus (he adds) clear to my mind, that whatever may have been the meaning or use of these markings, they were made at a date anterior to the building of the house,—that the stone, in fact, was an old stone, and had served

a different purpose before the Pict built it into the foundation of his dwelling."

Ruthven, Forfarshire.—A notice and sketch of a sculptured stone, from another weem in Forfarshire, has been obligingly furnished to me by my esteemed friend Dr Wise, of Rostellan Castle, Ireland, who, a few years ago, devoted great attention to early Scottish antiquities, when residing in this country. This carved stone was an oblong piece of sandstone, which formed a portion of the roof of a weem at Ruthven, near Meikle. Upon one of its surfaces are several isolated cups; two, surrounded by a single ring; one, by a double ring; and another is enclosed by three circles. Three of the ringed cups are traversed each by a radial groove or duct which runs downwards into three cups set in a row. See Plate XXV. fig. 3. "The cups and circles were," Dr Wise writes me, "partly covered with the other roofstones of the weem, proving the sculptures to have been cut before this carved stone had come to be used as a corner building stone."

8. IN FORTIFIED BUILDINGS.

The spade and mattock—those indispensable aids to archæology—have of late disclosed to us, in the eastern parts of Scotland, strange types and forms of archaic houses and places, furnished with more or less powerful artificial defences, analogous to, and yet differing from, the archaic burghs of the northern and western counties. In one or two such fortified dwellings, or clusters of dwellings, stones have been found cut with ring and cup carvings; as at

Tappock, Stirlingshire.—In the old forest of Torwood, lying between Falkirk and Stirling, Colonel Dundas, of Carronhall, has lately made some antiquarian excavations which have resulted in striking success. On the top of a hill in the wood he thought that he saw some indistinct evidence of building. He cut down the trees growing upon the spot, and, digging downwards, he excavated, with great zeal and skill a large strongly-built circular area, above thirty feet in breadth, and ten in depth. A passage from this central area was followed outwards, and opened externally, after going through twenty-five feet of continuous wall. The walls of the passage were built of large stones; and it was

roofed over by horizontal blocks. A second door passed out of the central area, and led to a stair, which mounted upwards to the ground, on a level with the top of the circular building. Externally the building has sloping sides all around; but whether it was originally constructed in this fashion, or the slope is the result of earth and stone accumulated by time, has not yet been ascertained. The interior walls of the central area are cyclopic, or built of large stones without lime. Probably at one time this circular structure was much higher, as Colonel Dundas found in its interior a great accumulation of large stones, similar to those composing the remaining lower portions of wall; and this accumulation looked like the debris of a higher portion of the building that had tumbled and fallen inwards. Amid this debris Colonel Dundas found three stones with circles cut upon them. The carved lines are about an inch broad and half an inch deep. These three stones are represented in Plate XIX. Like the walls of the building, they are composed of sandstone. Two of the stones (figs. 1 and 3) are each about two feet long, by fifteen inches or more in breadth at the broadest part. The stone (fig. 1) shows upon it the remains of two double concentric circles, each provided with a central cup. The stone (fig. 3) has sculptured upon it two concentric rings, the broadest and outermost being nearly six inches in diameter. There is no distinct central cup, but a radial duct or groove traverses the two circles. The second stone (see fig. 2) is about eighteen inches long and sixteen broad, and has on one edge a broken portion of a similar double circle and central cup; and a second figure, consisting of a single ring without a central cup. Three of the four double rings or concentric circles on the stones have thus central cups. From these carved stones being broken in some points through the line of the circles, Colonel Dundas inclines to think that they were probably cut and sculptured before they were used as building material in this ancient structure. Within the central area were found some flat querns.

Laws, Forfarshire.—To another Scottish proprietor, who has made upon his estate extensive diggings, in the same scientific and generous spirit as Colonel Dundas, we owe the disentanglement of another and still more extensive series of old fortified buildings. I allude to my friend Mr Neish, of the Laws, who, as is well known to the Members of the Scot-

tish Society of Antiquaries, has, in digging upon the high grounds above his house at the Laws, between Dundee and Arbroath, disclosed a building, having a central circular area like that at Tappock, paved with two or three layers of stone; and near it and around it a long series of strong and strange cyclopic walls running in the most enigmatical and curious directions. (See the *Proceedings of the Society of Antiquaries of Scotland*, 1860, vol. iii. p. 440, &c.)

In the course of his diggings among the old and puzzling structures covering this hill, Mr Neish has met with and preserved some stones with cup excavations; and one with a series of three concentric circles cut around a large central cup, the outermost ring being about eleven inches in diameter. This ringed stone and another from the Laws, with cup markings alone, is represented in Plate XII. figs. 4 and 5. The stone with the ring cuttings on it is apparently a fragment of a larger stone. Another similar piece was found, and lost.

9. IN AND NEAR ANCIENT TOWNS (OPPIDA) AND CAMPS.

In many parts of Scotland and England we have the remains of the structures in which large congregations or communities of the ancient inhabitants dwelt, in the form of more or less extensive strongholds, defended by ramparts and ditches, and containing within their circuit the round foundations of those hut circles which then formed the dwellings of our British forefathers. Often, when the strongholds are on elevated spots, the clusters and relics of the hut circles are found arranged together, lower down the hill, in more favoured and sheltered situations. Near these remains of olden British habitation are sometimes seen megalithic circles, monoliths, and barrows; sometimes the cairns of the ancient dead are interspersed among the hut dwellings of the ancient living;¹ and occasionally the cairns now alone remain.

¹ One of the most remarkable examples of this kind which I have seen exists in the parish of Kirkmichael, in Strathardle, Perthshire. In this parish there formerly stood above twenty megalithic circles (see their enumeration in the old Statistical Account, vol. xv. p. 516, and in Chalmers' *Caledonia*, vol. i. p. 72); and Archdeacon Williams and others have hence described the locality in question as an ancient centre of Scottish Druidism. Some time ago, when in the neighbourhood, I took

Within and near these archaic and now nameless towns, cup and ring cuttings have been found occasionally, as in the following examples :—

Lothians.—The summits of various hills in the Lothians and adjoining districts have remains of ancient strongholds and defences upon them. These fortified hills are generally not the highest, but those of minor elevation, and isolated. Within the walls, and oftener still below on the slopes of the hills, are frequently the remains of hut circles, and other pit-like excavations. Few or none of them have yet been searched for sculptured stones and rocks. On the middle hill of Craigiewood I found, some time ago, within a few miles of Edinburgh, an ancient British city of this description, abutting on a steep rock on the eastern side; and on its other sides defended by a triple rampart, and entered by gates placed obliquely. The proprietor, Mr Hope Vere, was so kind as to examine, by the spade and mattock, the mode in which the three inclosing valli on the western side were constructed. We found that originally they each consisted of a rude cyclopic wall of uncut stones, now buried under a covering of accumulated soil and turf. The area of the inclosed town extends to about forty acres. In different parts of it are still visible the hollows or pits which formed the flooring of the original houses or huts; and a little digging beneath the turf showed rude circular walls built around over several acres. Not many yards outside the southern wall of this ancient town was placed the stone cist, which I have described (page 28) and figured (Plate XV. fig. 2), with nine groups of concentric circles cut upon its covering stone; and, in the low ground below, another cist at Caerlowrie, with circles cut inside the stone lid.

occasion to examine the few stones now left of the circles, with a view of ascertaining whether they presented any ancient cuttings upon them; but detected none. On walking up to the higher muir-ground above, in the direction of a rocking-stone and some other reputed “Druidical” relics, I unexpectedly came upon a series of extensive stone remains of circular hut foundations; and in the midst of this extensive archaic town stood a very large cairn which had been partially thrown down in an attempt to open it. In the “Old Statistical Account of Scotland” it is stated, that from the east side of this cairn there formerly extended two straight stone avenues, above thirty feet broad and a hundred yards long, while each had a small cairn at its further extremity. My excellent and active friend, Mr John Stuart, has latterly prosecuted various researches with the spade and mattock amid these remains of ancient human habitations.

In describing previously (p. 28) this cist-cover at Caerlowrie, I omitted to refer to the drawings of it, kindly made for me by Mr Hutchison, and copied into Plate XVI. fig. 2.

The Caiy Stone, in Colinton parish, a few miles south of Edinburgh (see antecedently, p. 32), is also placed near the remains of ancient sepulchres and dwellings. "Not far from it," writes Dr Daniel Wilson, "are still visible the rude earthworks of a British camp."¹ Maitland, in his *History of Edinburgh* (1753), describes the Caiy Stone as standing in the neighbourhood of "divers large cairns," which were placed near a "large oval camp," through which an old military way passed.² General Roy speaks of this military way as the continuation of the English Watling Street, which runs "under the east end of the Pentland Hill," onward to Cramond.³ Professor Walker describes this ancient encampment as of an oval figure, surrounded by one great ditch and rampart, and containing about fifty acres of ground.⁴ This fortified inclosure was, in the end of the last century, more correctly described by the Rev. Mr Whyte, of Liberton, as an ancient town rather than a camp; and this obliterated and long-forgotten city "must" (he naively remarks) "have made an important figure before the Castle of Edinburgh—so greatly famed for antiquity—existed, and, consequently, long before there was any appearance of the adjoining city, which is now so flourishing and extensive, and which has been so much admired on account of the height and grandeur of its buildings."⁵

Ross-shire.—Perhaps we may justly refer to this division some sculptured stones lately found by Mr Joass, of Dingwall, near that town. The hill Crock-ri-avach is situate about two miles from Dingwall. A mutilated megalithic circle stands on its south-west shoulder. Near its site, within a dilapidated circular wall, about fifty yards in diameter, is a hut circle, nearly thirty feet across; and at a short distance there are the more indistinct remains of a second. On the hill, nearly half a mile from these habitations, lie nine or ten loose schistose slabs, averaging

¹ *Prehistoric Annals of Scotland*, vol. i. p. 138.

² *History of Edinburgh*, p. 507.

³ *Military Antiquities of the Romans in North Britain*, p. 103.

⁴ *Essays on Natural History*, p. 605.

⁵ *Proceedings of the Society of Antiquaries of Scotland*, vol. i. p. 308.

about five or six feet in length and breadth, and a foot and a half in thickness. Their upper surfaces are exposed, and sculptured with cups and rings. The figures vary from single isolated cups to two or more cups connected together with a groove or gutter, and others are surrounded completely or partially by a single ring. In some instances, the incomplete ring surrounding the central cup ends in two cups or depressions, as represented in the diagram of them in Plate XIV. fig. 1. On one slab there is the appearance of one central cup, surrounded by a circle of seven other cups. A piece of yellow flint was found near one of the stones. Near a hut circle on the top of the hill, flint arrow heads and cups are reported to have been formerly found in abundance. One of the sculptured stones was carefully dug under by Mr Joass, and was found to lie on undisturbed boulder-clay, while the boulder-clay rested on the soft shale of the district.

Kirkcudbrightshire.—The Rev. Mr Greenwell has directed my attention to a flat rock-scalp on the farm of High Arvie, in the parish of Parton, Kirkcudbrightshire, as presenting appearances of artificial stone-cutting, which he believes to be referable to the class described in this memoir. The carved rock is known as the “Cow’s Clout,” and is marked with three or four cup-hollows of the usual form and size, and a slanting ovoid circle, not unlike that which a cow’s foot produces in softish soil. It would be interesting to examine and uncover the neighbouring rock surfaces in search of other markings. Cairns, &c., exist in the immediate vicinity.

Berwickshire.—About two miles west from Spottiswoode is Harefauld, a camp or habitation of an irregular circular shape. The walls are formed of stones, and in many places are from ten to twenty feet thick. The enclosure is about fifty-five yards across in one direction, but more in an opposite line. There are vestiges of a dividing wall, running from north to south. On the north side, in the thickness of the wall, are several cells or houses—one of them measuring nine feet long by four across; and others also occur in the thickness of the wall towards the west. On the north side are circular walls projecting into the area from the outside wall, forming inclosures of varying size, from six feet to twenty feet in diameter. On the south side, in the wall, and near to what was the entrance to the fort, my friend, Mr John Stuart—to whom I am indebted for these and other notes—found a large slab or

gate-post, having several cup excavations of varying size cut upon its surface.

Doubtlessly a little more extended inquiry in Scotland will increase much the number of instances of stones with cup and ring carvings, found in connection with those aggregated hut circles, towns, and camps of ancient man that lie scattered in various positions over the country. If, passing from Berwickshire, we cross the Tweed, we find—within a few miles of the Scottish border—numerous and remarkable examples of cup and ring carvings upon the stones and rocks of Northumberland; and many of these lapidary sculptures stand in more or less direct relation with the sites of ancient human habitations in that county. In this district their character and numbers are so interesting as to deserve a more detailed notice of their position and peculiarities.

Northumberland.—A high and broad ridge of sandstone runs for a distance of many miles from north to south through the moorlands of Northumberland. There still remain, scattered thickly along its course, numerous relics and evidence of ancient human habitation, in the form of old camps or cities, hut-circles, cairns, barrows, stone cists, &c. The sandstone of the district projects upwards in different places, in the form of bare scalps and blocks of rock; and in various localities, near the sites of ancient human occupation and dwelling, these scalps and blocks have cup and ring markings cut upon them. It is further remarkable that,—as has been specially pointed out to me by my friend, Mr Tate, of Alnwick,—while the sandstone rocks in the northern region of Northumberland are thus profusely sculptured, the hard porphyry rocks in their immediate neighbourhood, forming the Cheviots, show no sculptures at all, although on their lesser heights, flanks, and spurs there are also camps, hut-dwellings, and sepulchres apparently of the same type and same age as those situated on the adjoining sandstone moors. Mr Tate believes that the sandstone, as more easily cut than the hard porphyry rock by the imperfect tools of the archaic sculptors, was alone carved by them. But possibly any sculpturings made on the porphyry rocks have—like other similar carvings on hard rocks elsewhere—disappeared before those on the sandstone, in consequence of the more deep and destructive weathering of the surface of the former.

The sandstone blocks and platforms on which the Northumberland

lapidary sculpturings have hitherto been chiefly found, stretch from Rowtin Lynn, not far from the village of Ford, to Beanley Moor, near to Eglingham. Betimes they will probably be detected running further south. Between Rowtin Lynn and Beanley Moor—or within a distance of twelve or fifteen miles—between forty and fifty sculptured rock scalps and stones have been already detected, with, I believe, above three hundred examples of rings and concentric circles cut upon them. Mr Langlands, of Old Bewick, who most kindly showed me the rock carvings in his neighbourhood, was the first to notice one of these Northumberland sculptures as far back as 1825. In 1852, a most accomplished and able archæologist, the Rev. William Greenwell, of Durham, when accidentally resting, as he has informed me, near the sculptured rock at Rowtin Lynn, observed some appearance of carving upon an exposed piece of it, and speedily satisfied himself of the fact, by removing from the surface of the rock portions of its thick and ancient covering of turf. A few months afterwards, Mr Greenwell read an account of his discovery to the Archæological Institute, at its Newcastle meeting; but unfortunately the paper was lost, and hence not published in their Transactions. Next year (1853) Dr Johnston of Berwick figured and briefly described the Rowtin Lynn rock in his “Natural History of the Eastern Borders.” Subsequently notices of this remarkable rock were given to the Berwickshire Club, and to the Society of Antiquaries of Scotland by Mr Tate, who has extended his inquiry into all the other known sculptured stones of Northumberland with indefatigable zeal and characteristic talent.¹ Another very distinguished Northumberland antiquary, Dr Collingwood Bruce, has laboured most assiduously in the same walk, and

¹ The publication of the present essay has been greatly delayed by various circumstances, besides the more urgent claims of professional work; as by the search after new specimens; by the collection of drawings of the sculpturings; and, above all, by the misfortune of a half of the manuscript being lost with a travelling portmanteau on the railway. After it was communicated to the Society of Antiquaries, I had the pleasure of reading over the principal heads of it to Mr Tate, and found that in most points he and I were agreed. He has latterly drawn up and published, in the “Proceedings of the Berwickshire Naturalist’s Club” for 1865, p. 153, a long and admirable account of all “The Ancient British Sculptured Rocks of Northumberland and the Eastern Borders,” illustrated by careful and accurate plates.

has collected for the Duke of Northumberland an elaborate series of large and magnificent drawings of these sculptured rocks and stones.

The Northumberland rock sculptures present all the usual types of these lapidary carvings, with the exception of the form of the volute or spiral; no instance of which, I believe, has yet been detected among the three hundred and odd ring sculptures which have been found in that county. Cup-cuttings, though not specially noticed by the Northumberland antiquaries, are as frequent upon their rocks as upon our Scottish stones. On the rock at Rowtin Lynn, which stands out as an irregular oblong outcrop of stone some ten feet high by sixty feet in length and forty in breadth, there are still about fifty or sixty ring-cuttings and about thirty cup-cuttings;¹ but many more probably existed on it formerly, as a considerable portion of this rocky outbreak has been removed by quarrying. This is still the largest of the carved rocks in Northumberland, though some other rock-platforms and stones in the district—as those at Old Bewick and High Chorley—have each on their surfaces twenty or more groups of ring-cuttings. The figures in Plate XXIV. give a good idea of the general character of the Northumberland rock cuttings. They are taken from one of Dr Bruce's drawings of the sculptures on Chatton Law, two or three miles south of Rowtin Lynn. But, as already hinted, one of the most interesting facts connected with these sculptures on rocks *in situ* in Northumberland, and the circumstance which leads me to notice them under the present head, is their relation to the numerous old British towns, cities, or camps of the district. The position of these archaic towns or camps is marked by the existence of ramparts formed of rude earth and stone walls, and ditches; and sometimes, as at Beanley, Bewick, Horton, and Dod Law, the roots or foundations of the ancient hut circles or dwellings can be yet traced within the enclosed space. The camp or town walls are,—like the many similar structures in Scotland and England,—usually of a roundish form, and have generally a large second or supplemental enclosure—less perfectly defended—attached to one side of the primary camp. All, or almost all, of the Northumberland sculptured rocks are situated within a

¹ On the Rowtin Lynn Rock is an example (the only one I have noticed in England) of a cup surrounded by a circle of five or six cups—instead of a circular line—a already described at p. 8.

distance of ten, fifty, or at most a hundred yards of those archaic dwellings of human communities; and a few of the carved rocks are placed within the artificial ramparts. The camp or city of Old Bewick—strongly and strikingly situated on the brow of a high hill, with one side protected by a deep cliff, and the other, or land side, defended by four high and formidable ramparts—has two sculptured rocks or stones within the ramparts, and two or three placed outside of them. In Plate XXV. figs. 1 and 2, are two sketches, kindly drawn for me by Miss Langlands, of one of the sculptured stones at Old Bewick. The stone, which is placed about one hundred yards outside the walls of the camp, is nearly ten feet square on its slanting top, and stands about three or four feet high. Fig. 1 shows the ring sculptures on the top of this large sculptured block of rock, and fig. 2 represents a row of cup-cuttings carved upon its sides. The large sculptured rock at Rowtin Lynn stands within the enclosure of a secondary camp, the primary camp or town being defended by four separate ramparts and ditches. The carved stones at Beanley, placed amid the foundations of hut circles, are also situated in the supplemental enclosure near the old strongly-walled camp.

Stones sculptured with cups and rings have been found in connection with ancient camps and towns in other districts lying still farther southward, as in Yorkshire, Wales, Cornwall, &c.

Robin Hood's Bay, Yorkshire.—A large mass of sandstone in the moor above Robin Hood's Bay, near Whitby, had some sculpturings upon it, part of which were split off by Mr Kendall of Pickering, in whose garden I have seen the slab of carvings which he thus procured. Mr Kendall's slab is about five feet long and two and a-half broad. Upon its surface are three or four isolated cups about an inch and a-half in breadth, and five or six others surrounded by ring-cuttings. See a sketch of it in Plate XXVI. fig. 1. Two or three of the ring-cuttings consist of single circles. One consists of a triple circle and straight radial groove. The ends of the circles, as they reach the traversing groove, turn round and unite together, as in the horse-shoe pattern in Plate II. fig. 9. The two remaining circles, which are respectively five inches and eight inches in breadth, and consist of cups surrounded by two and by three circles, are conjoined together by a long gutter. The upper circle shows a single and the lower a double horse-shoe pattern. In the uppermost or

double circle the rounded ends of the rings are united and bestridden by a shallow right-angled line; and the ends of the lowest or triple circle are in part also conjoined by the gutter which runs from the double circle above, and by a cross straight line which runs off from it. The circles are more imperfectly finished than usual, and at some parts present almost an appearance of being punched out rather than cut out.

I am not aware whether or not any other evidences of the habitations of ancient man were found in the immediate vicinity of these rock-carvings on the Robin Hood Bay Moor; but, in his excellent History of Whitby, the Rev. George Young has shown that, in the vicinity of that town, barrows, stone circles, and pillars are common; and the remains of clusters of hut circles and circular pits, or "ancient British settlements, abound."¹

Wales.—No careful search has yet, as far as I know, been made among the ancient fortified stations and towns scattered over Wales for the presence of ring or cup carvings; but I have seen one remarkable specimen, and from it I should expect that many others will betimes be discovered in the Principality. Near the village of Llanbedr, in Merionethshire, are two tallish monoliths, and one intermediate stone of much smaller size, inscribed as "Meini Hirion" in the Ordnance map. The three are placed near each other, and stand in a row. The two lateral monoliths are respectively about seven and ten feet high. The short intermediate stone is only about three feet in height, and is cut on one of its faces with a faded volute, consisting of six or seven spiral concentric lines, the diameter of the outermost being about eleven inches. But this carved stone, instead of being a part—as supposed—of a set of standing stones belonging to the spot where it now stands, was—as I am assured by Dr Griffith of Hyeres—removed several years ago down to its present site from one of the ancient fortified enclosures, camps, or towns, which abound on the neighbouring high grounds.²

Cornwall.—My friend Mr Blight, of Penzance, who has already done so much for the archæology of his native country, writes me, that he has found at Lancreed, on a fine-grained granite rock *in situ*, five cup carvings, with a curved incised line over them. The cups are, as usual,

¹ History of Whitby, 1817, vol. ii, p. 666.

² Mr Cliffe, in a short letter published in the *Archæologia Cambrensis* for 1849.

from two to three inches in diameter. These sculpturings are placed, Mr Blight adds, "about two hundred yards from a strongly fortified group of hut circles, and one hundred yards only from the site of a large walled grave, which, on being opened by a former occupant of the estate, was found to contain an urn with ashes."

Isle of Man.—In the wood situated immediately behind the churchyard of Kirk Braddan—a locality so celebrated for its number of Runic inscriptions and crosses—is an ancient city or town, with an angled portion of its strong encircling walls still standing, and faced with huge upright stones. The foundations of circular and other forms of ancient structures and dwellings exist in a secondary town or camp within the circuit of the wood. On the sides of the largest outcrop of rock standing within this circuit, Professor Babington and I traced, after the removal of a covering of old moss, a number of cup excavations, some of them conjoined together, by grooves or guttered lines, as represented in Plate II. figs. 1 and 2. One of a great group of massive stones placed on the northern border of the wood has between twenty and thirty cups cut upon it,—some of them apparently arranged in a circular form. Three or four stones within or near this interesting site of an ancient Manx community, appear to show artificial straight lines and markings, for tracings of some of which I am indebted to the kindness of Dr Alcock of Birmingham. In his "*Vestigia Insulæ Manxiæ Antiquiora*" (pp. 96 and 190), Dr Oswald alludes to this ancient town, and states that its remains extend over ten acres or more; and he gives a drawing of portions of the walls, and of a flat excavated flagstone surrounded by the remains of a small circle.¹

p. 321, alludes briefly to some of the many megalithic remains in this district of Merionethshire, and incidentally states that, in a large cairn on the summit of Penmorn, he observed "a huge stone with remarkable indentations." Are these indentations artificial cup excavations?

¹ Another old churchyard in the Isle of Man, rich in Runic monumental stones,—that of Manghold,—is still surrounded at different parts with a deep ditch and a high rampart. Within the area of these ancient fortifications at Manghold stands the church, thickly surrounded by graves. The line of fortifications is much more extensive than the site of the interments, containing about five acres; and in other parts within their circuit, I traced in the green sward the remains of old hut

10. ON THE SURFACES OF ISOLATED ROCKS.

Several of the lapidary carvings included in the last section were found cut upon rocks *in situ* within or near old British strengths or towns. But there is another section of them carved on rocks which are so far isolated, that nowhere near them do there now exist any traces of ramparts, walls, fosses, or circular hut foundations, such as are so often observable in our island in localities of ancient human communities.

In all likelihood, however, the rock carvings I allude to were cut originally in the vicinity of collections of human population, though there now remain no visible evidences of that population except their rock sculptures and their sepultures.

We have a variety of examples of this last kind in Argyleshire, in the district lying between Lochgilphead on the east, and Crinan on the west coast of that county. In other words, on the higher grounds skirting the valley in which the Crinan Canal passes from Loch Fyne or Loch Gilp to the Atlantic Ocean, several localities have been here discovered with the rocks *in situ*, sculptured with ring and cup carvings; as at Carnban, Auchnabreach, Tyness, and Calton Mor.

Carnban, Argyleshire.—The first notice of the rock-sculptures in Northumberland, and, as I believe, in England, was published, as I have just stated, in 1852. The Rev. Mr Greenwell, of Durham, who discovered the carvings on the Rowton Lynn, &c., read, as already stated, a paper on the subject earlier in the same year to the Archæological Institute. In 1830, or twenty-two years before, a notice of the analogous rock ring-cuttings at Carnban was published by Mr Archibald Currie, formerly a schoolmaster at Rothesay, in his Description of the Antiquities, &c., of North Knapdale. He urges that the lapidary carvings on the sculptured rock at Carnban are “worthy of the attention of the scientific antiquarian;” and to his account of the ring-cuttings there

circles and dwellings. At Manghold, as at Kirk Braddan—which were both probably in ancient times the sites of fortified towns—there now are to be seen within the area of the old walls, the graves of the modern dead, and the remnants of the dwellings of ancient living man. In the centre of each is the Christian church—the only modern building—and in both localities it may possibly occupy the site of some ancient fane for Pagan worship.

he adds a theory of their import which possesses probably one merit, namely, that it is at least both as reasonable and as ridiculous as many hypotheses that have since been broached on the same subject. "In the hill," writes Mr Currie, "about a mile above the 'Doctor's' (the sobriquet, as I am told, by which Mr M'Callum, the former innkeeper at Carnban, was usually known), on a rock whose surface is level with the plain, there are cut groups of concentric circles, three in a line, and fifteen in number. These circles are similar to those used in astronomical plates for elucidating the revolution of the planets round the sun. Of these circles, there are five in each of the concentric ones, probably to correspond with the number of the planets then known. The Doctor is of opinion that this is one of those methods which were in use previous to the introduction of letters into this country, for commemorating extraordinary events; and in the case in question, he thinks these circles represent the right of the proprietor to the estate where the rock lies on which they are engraved, and that they signify that his descendants were to enjoy it as long as the celestial luminaries which the circles represent should perform their unerring revolutions round the sun. This opinion is not at all improbable; for of old, rights to inheritances were in many instances conveyed by hieroglyphic symbols, similar to those now described. I am informed, on unquestionable authority, that the right of Macmillan to the estate of Knap, in South Knapdale, was cut in rude characters in the Celtic language on a rock in the shore at the point of Knap, which are now obliterated by the action of the waves on its surface."¹

Auchnabreach.—About a mile and a half north-eastward of Carnban, and higher on the sides of the valley, are rocks which show still more extensive ring-carvings.² On the high ground upon the farm of Auchnabreach

¹ See Description of the Antiquities and Scenery of the Parish of North Knapdale, Argyleshire, by Archibald Currie, author of the "Principles of Gaelic Grammar, &c., Glasgow, 1830, p. 34. The appearances presented by the cup and ring cuttings on the hill above Carnban are all faithfully represented in Plate XXII., and it is hence unnecessary to describe them. I have already (p. 2) enumerated the figures of which they consist. No other carvings have hitherto been found on the same hill.

² The existence of sculptures at Auchnabreach was first discovered by the former intelligent farmer there, Mr Maclean, now innkeeper at Kilmartin.

are various bare, rounded scalps of Silurian schist, projecting to the height of two, ten, twenty or more feet above the surface. These scalps are magnificent specimens of rock surfaces ground and planed down by old geological glacier action. The surfaces of three of these rocks—thus smoothed and prepared as it were by the gigantic polishing machinery of nature—have been subsequently scratched and carved in numerous places with rude cup and ring cuttings by the frail and feeble hand of archaic man. See specimens of these Auchnabreach carvings in Plates XXI. and XXIII.

The three rocks on which the cup and ring carvings have hitherto been discovered are in the second field above the old farm-house of Auchnabreach.

The first and highest of these rocks has, scattered over a surface twenty-nine yards long and seven yards wide, about forty concentric ring-cuttings, and nearly an equal number of cups and hollows without circles around them. The Rev. Mr Mapleton, who has most carefully examined these sculpturings, informs me that of the ring-cuttings one is three feet in diameter, and composed of seven circles and a central cup; a second, two feet five inches in diameter, consists of six circles cut around a central cup; a third, two feet seven inches in diameter, is formed of four concentric circles; a fourth, one foot nine inches broad, contains six circles and a central cup; a fifth, eight inches in diameter, has a cup surrounded by two circles; and so on.

The second rock scalp at Auchnabreach is about forty feet long, and thirty-six feet broad. It contains thirty-six groups of ring-cuttings, and fourteen cup-cuttings. The largest concentric ring-cutting is two feet seven inches in diameter, and consists of nine or ten circles; a second, of nearly the same diameter, has nine circles carved around its central cup; a third, seven circles; and so on. Almost all, but not all, of these concentric circles at Auchnabreach are traversed by the usual straight radial groove or duct. These grooves run on in some instances and unite with others. Their direction is generally, but not always, downwards.

My kind friend, the Rev. Mr M'Bride of Bute, the well-known geologist, discovered the third sculptured rock here, when looking for the effects of glaciation. This third rock is placed about a hundred or a

hundred and fifty yards south of the others, and its exposed surface is much smaller than the other two, being as yet cleared of turf only to the extent of about three yards in length, and two in breadth. Upon the cleared portion I counted twelve ring cuttings, each with a radial groove, and seventeen cups and hollows with no surrounding circle.

On the Auchnabreach rocks most of the concentric circles are so scattered as to be separate and unconnected with each other, but occasionally two or more touch at their edges. The radial groove is usually, but not always present. Some consist only of one cup and one surrounding ring, and the radial groove is untraceable in several of these. There are two or three peculiar sculpturings, especially on the second rock-scalp. One of them consists of a very distinct double volute, as represented at the bottom of first section of Plate XXII., the whole lateral breadth of the two combined spirals being about ten or eleven inches, while their depth is about eight inches. A second group of three circles near this touched each other and amalgamated at their sides. (See the same Plate.) Near these two groups was a third, consisting of one concentric ring around a central cup, and with a radial groove. The ring was six inches in diameter. From its outer edge, on the side opposite the radial groove, proceed three straight parallel lines, each about eleven inches in length. See Plate II. fig. 12. The radial line from this same circle joins the outer circle of another ring-cutting. These, and some surrounding circles and cups, are represented in Plate XXXII., first section. Some of the ring-cuttings, particularly on the third rock, are much twisted and indented on their sides (see same Plate, second section), and by no means so accurately and regularly round in form as these lapidary circles usually are.

The rock upon which the first and largest collection of concentric rings and cups at Auchnabreach is placed has a Gaelic name, which, according to John Kerr, an old shepherd brought up on the farm, is "Leachd-nan-Sleagher"—the rock of the spears. Mr Henry D. Graham, to whom I am much indebted for drawings of the Auchnabreach sculptures and others, believes the word to be "Leachd-nan-Sluagh"—the rock of the hosts or gatherings. The Rev. Mr M'Bride has perhaps more happily suggested it to be "Leachd-nan-Slochd"—the rock of the pits or impressions. The rock itself, let me add, is in a position which commands a

charming view of the waters and shores of Loch Gilp and Loch Fyne, with the distant and magnificent hills of Arran serving as a gigantic background.

Calton Mór and Tyness, Argyleshire.—A few years ago, when a few miles west of Auchnabreach, some rock in the garden of Calton Mor, the beautiful seat of Mr Malcolm of Poltalloch, was being blasted and removed, several carved concentric circles were observed by the workmen to be cut on the rock when it was exposed. But, unfortunately, ere these sculpturings attracted sufficient attention, all were destroyed except two specimens, which are carefully preserved, and show the usual forms of these concentric rings and cups. Calton Mor is four or five miles distant from Carnban; and about a mile north from Calton Mor are the sculptured stones at Leargie, near Kilmartin, described already at p. 24.

Near Calton Mor, is a rock at Tyness, with eleven ring cuttings upon it, and some cups. Mr Mappleton informs me, that on the hill-top above Tyness there stood a cairn, in which he found lately the remains of two cists and some burnt bones, with "a skeleton, of later date, between the two cists, but probably put there by the men who destroyed the cairn. There is also," he adds, "apparently the remains of a 'dun,' a quarter of a mile north-east of Tyness."

I have spoken of these sculptured rocks at Carnban, Auchnabreach, Tyness, and Calton Mor as "isolated," because few or no evidences of ancient camps or communities are now, as far as I could observe, to be found near them. They all lie, however, within a few miles of each other, along the valley of the Crinan Canal; and that valley—forming the neck to the peninsula of Cantyre—is, as we have already seen, full of the sepulchral remains of an ancient and large population. All the neighbouring ground belongs to the rich and princely estate of Poltalloch, and is in most places too highly cultivated, agriculturally, to allow of the foundations of hut circles, ramparted walls, and other such signs of human habitations, to have remained. But the very nomenclature of the hills, lying within the circuit of this valley of sculptured rocks and stones, sufficiently attests its former populousness and importance, by showing that every hill-top was formerly a fort or "dun." My friend, Dr Hunter, pointed out to me that, standing on the hill on which the Carnban sculptures are cut, we had, within a radius of one or two

miles only, Dunamuck, Dunans, Dunbuy, Dunchain, Dunamarak, Duncraigig, and Dunadd,—the last of these a fort, still remarkable by its huge cyclopic walls, and the high and isolated conical rock on which it is built. In the seventh and eighth centuries it continued to form, as we know from ancient Irish annals, one of the most important strongholds in the Western Highlands.¹

11. ON ISOLATED STONES.

In the preceding pages I have cited numerous examples of the cup and ring carvings, as found on individual stones connected with archaic sepulture or habitation. Some of the examples already quoted, as the stones found at Walltown, Auchinlary, Frith, &c., are so indeterminate in the conditions under which they were found, that perhaps they should have been more correctly placed in this chapter. I have notes of a few instances where the sculptures were found on stones of a still more isolated cast; as at

Balvraid, in Glenelg, Inverness-shire.—Mr Joass, of Dingwall, discovered, about half a mile from the well-known old brochs of Glenelg, a stone covered with cup-markings, and represented in Plate XIV. fig. 2. "The stone, which measures above six feet in length, is," he writes me, "lying on the ground. The markings I have sketched are quite distinct; but there are a great many more, particularly towards the left-hand end, which are rather faint, and they appear to be disposed in rows with a certain degree of regularity."

Cargill, Perthshire.—In the thirteenth volume of the first Statistical Account of Scotland, a description of the parish of Cargill was published about fifty years ago. It is therein stated, "Near the village of Cargill may be seen some erect stones of considerable magnitude, having the figure of the moon and stars cut out on them, and are probably the rude remains of Pagan superstition. The corn field where these stones stand is called Moonshade to this day" (p. 536). The stones thus marked, and standing in Moonshade or Moonbutt's field, were dug around and under,

¹ See Dr Reeves' *Life of St Columba*, pp. 377 and 384; Anno Dom. 683, "Obsessio Duin At.;" Anno Dom. 736, "Cengus Mac Fergus, rex Pictorum, vastavit regiones Dailriatai et obtinuit Dun Att."

and buried some half century ago in the agricultural improvement of the ground. Mr Fergusson, the very intelligent schoolmaster of the parish, has repeatedly tried to discover these buried stone relics, but hitherto in vain. But he has been more successful in disinterring other marked and carved stones in his neighbourhood.

A. In Newbigging, which borders upon the Moonshade fields, he raised a stone, a corner of which jutted from the earth. It is a slab of grey whinstone, three feet six inches in length, two feet one inch in breadth, and seven inches in thickness. Upon one of its faces—as represented in Plate V. fig. 3—are five series of concentric circles and some isolated cups. The external rings of four of the series of circles run more or less into each other. The radial ducts from two of the largest unite into a common gutter, which, after running a considerable space, ends in an isolated cup. Two of the circles do not show any radial groove.

B. More lately in Gladesfield, about ten or twelve hundred yards west of the supposed site of the Moonbutts, Mr Fergusson has uncovered a stone still more sculptured. The stone is about five feet in height, and three and a half broad. One side of it is sculptured in the way represented in Plate V. fig. 4. The sculptures consist of a number of scattered isolated cups, of several cups surrounded with circles, and of radial grooves, some of which are connected with a gutter which runs straight along the surface of the stone for a distance of about four feet. Some of the circles are single; one cup has two, another three, and a fourth has four or five concentric circles drawn around it. One concentric circle has its outer ring passing in its course through three cups; and its radial duct runs outward to the left, and forms the beginning or end of the long, linear straight groove which passes longitudinally along the face of the stone.

C. About two hundred yards north of the stone (*A*) is the Brisbane stone, about six feet in length, and three and a half in breadth, with a cup-marking or two upon its face.

D. Upon a stone, about a hundred yards or more east of the school-house, Mr Fergusson has found a stone with twelve or fifteen cup-marks upon it. The stone was discovered in “a small mound” composed of stones and earth. The mound is about twenty-four feet long, fifteen broad, and three high. Further researches in this mound or barrow may

possibly result in the discovery of sepulchral remains, which may prove interesting.

Mr Fergusson believes that the stones at Cargill are arranged in a methodic and angulated direction in regard to each other. In their near neighbourhood one or more megalithic circles are reported to have formerly stood.

Migvie, Aberdeenshire.—At a distance of about two hundred yards eastward from the old churchyard of Migvie, the plough, a few years ago, struck upon a flat stone, which, when dug out, was found to be nearly triangular in shape, about two feet nine inches long, and three feet across at its broadest part. Part of its surface was covered with various cup excavations, four of which were united crosswise by ducts or gutters, and some in pairs by grooves of various depths. For a drawing of the stone I am indebted to the kindness of Dr Robertson, of Indego. The field in which this stone was discovered, and still lies, is about a mile distant from an earth-house or weem, which was found in the same parish.

Inchture, Perthshire.—My friend, the Rev. Mr Honey, of Inchture, showed me some time ago a whinstone block, found in the foundation of a wall opposite the church, and having on its hard and smooth surface three or four cup markings, of the usual breadth and depth.

Arbirlot, Forfarshire.—About two miles from the Kirktown of Arbirlot, Mr Gibb, of Aberdeen, some years ago observed and sketched an earth-fast stone presenting the cup and ring markings figured in Plate XV. fig. 3. They will be observed to belong to the second type, described in p. 4. Other similar stones are said to be in the neighbourhood. Dr Dickson, of Carnoustie, and Mr Miller, of Arbroath, have both of late searched, but hitherto unsuccessfully, for these marked rocks. The so-called "Girdle-stone," in the adjoining parish of Rescobie, about four feet long and three broad, is cut on its surface with two circles, the largest of which is above two feet and a half broad, and hence does not, I believe, belong to the class which we are considering in this essay.

Pitscandly, Forfarshire.—In Mr Stuart's work on the "Sculptured Stones of Scotland" he mentions a carved fragment at Pitscandly, in Forfarshire. Mr Shaw has kindly examined this stone for me, and furnished me with a drawing of it, which is copied in Plate XVI. fig. 4. The stone is about a foot and a half in breadth and length; on its surface are two

or three cup-excavations, a single incised ring, and two concentric circles, with a central cup and long radial groove. In the "Proceedings of the Society of Antiquaries of Scotland," vol. ii. p. 190, Mr Jervise mentions this piece of carved stone, and describes it as reputed to have scaled off from one of the two remaining large obelisks of Pitscandly—an opinion which, he informs me, some later observations of his own have confirmed. These Pitscandly stones stand on the top of an artificial mound. One of them is of great size, and "both," adds Mr Jervise, "appear to be the remains of an ancient circle. A clay urn, with burned ashes, was found at the base of one of the stones. The whole of the locality abounds in traces of ancient sepulture."

La Mancha, Peeblesshire.—A broken slab, about two feet square, covered with very rude double rings and a spiral circle, was found by Mr Mackintosh, at La Mancha, in Peeblesshire, in digging in a bank of gravel. There were some other large stones near it; none of them marked. Possibly this stone, therefore, is sepulchral in its character. The half-effaced circular sculptures upon it are represented in Plate XVI. fig. 3.

Jedburgh, Roxburghshire.—Sometime ago Mr Tate, of Alnwick, discovered in the garden of Mr Matthewson at Jedburgh a stone cut with concentric circles, possibly a sepulchral cist, but peculiar in some respects. The stone is roundish, but broken off at one side, and about eighteen inches broad. Its face is covered by five incised concentric rings, and through the central cup pass at right angles two straight lines, which completely bisect all the circles. The outermost circle is about fourteen inches in diameter. Some inches to the left of the central cup is a second, with one incised circle around it. Arranged circularly outside of the outermost circle is a series or ring of points or stars, each cut out—so Dr Falla writes me—"as with a single stroke of a pick, rather than hewn out." I am indebted to the same gentleman for the sketch of this stone, given in Plate XVI. fig. 1.

High Hucklow, Derbyshire.—A detached flat stone, found in the Peak of Derby, and which I have already alluded to at page 6, is of the same shape as some of the urn covers met with elsewhere. The cast of it sent to me by Dr Aveling shows it to be a broken slab, measuring twenty-one inches by eighteen, and cut on one side by a concentric

circle of seven rings, and probably of twenty inches in diameter, when the stone was entire. There is no central depression nor radial groove. See a representation of this fragment in Plate XVI. fig. 2.

PART III.

ANALOGOUS SCULPTURES IN OTHER COUNTRIES.

The instances of cup and ring sculptures which I have described or alluded to in the preceding chapters, have—with a few exceptions noted in the context—been all discovered within the last few years; and, no doubt, very many more examples will be detected in other localities in Scotland and England, when sufficient archæological investigation is directed towards them. But, in the meantime, it is not uninteresting to inquire if any similar lapidary sculptures have been found elsewhere. On this subject there still exists as yet very limited information. I am not aware that any carvings of the same early art-type have hitherto attracted the notice of antiquaries or travellers in any distant quarters of the world; and Brittany and Scandinavia are the only parts of the Continent of Europe where, as far as I know, any analagous sculpturings have as yet been met with. They have been found also in Ireland. I shall very briefly advert to some of the leading instances and forms of the analogous early lapidary sculptures of Ireland and on the Continent, with a view of comparing and contrasting them with the simpler cup and ring cuttings of Great Britain.

CHAPTER VI.—LAPIDARY SCULPTURINGS IN IRELAND.

In Ireland, stones, sculptured with cups and concentric rings exactly like those we have described in the preceding pages, have been found, I believe, in different parts of the island. For example, in Plate XXVII. is a rough sketch of a large slab cut with cups and rings, and groups of circles apparently with radial grooves similar to those of Scotland and England, which was found in the western county of Kerry. A

cast of it has been for many years in the Museum of the Royal Irish Academy.¹

I have been furnished by Dr Wise with a sketch and note of a flag sandstone found by him at a place called Aghnacerribb, near Dingle, in Kerry, partially carved in a similar style to the preceding stone from the same county. The stone at Aghnacerrib is about five feet three inches square, flat on its surface, and probably *in situ*. Upon it are four cups of different sizes, surrounded by two or three concentric circles, made with almost geometrical precision. No radial ducts or grooves traverse the circles. In the neighbourhood of the stone are other interesting archæological remains, as stone circles, a circular fort, and many clog-hauns, or ancient stone dwellings.

As specimens of apparently similar sculptures found existing on the eastern side of the island, I may refer to two slabs of granite, discovered and sketched by Mr Du Noyer, from two localities in the county of Dublin. The first, a slab lying close to the base of the round tower of Rathmichael Old Church, in the county of Dublin, has cut upon it two groups of four concentric circles, each connected by three lines. The second slab was used as a tombstone in the churchyard of Tullow, and has an ornamentation. In both these specimens the circles are, I believe, formed by intermittent dots or pits, and not, as in the British specimens, by continuous incised lines. But these sculptures are peculiar from another circumstance, namely, that outside the circles, and intermediately between them, are marked out straight lines running in different directions, an appearance never seen around the cup and ring cuttings of Scotland and England. Mr Du Noyer suggests that those two stones under discussion were "carved in Pagan times, and the stones subsequently adapted to Christian uses."²

I have in a previous page (p. 24) referred to a cromlech at Rathkenny

¹ Dr Graves has, I am informed, made an important collection of analagous sculptures from stones and rocks in various parts of Ireland, and we may soon expect a full account of them from his able pen.

² Proceedings of the Royal Irish Academy, vol. viii. p. 61. I have seen sketches of stones found in Ireland at East Goulane and Banoge with rings and cups, and with the same exterior straight lines; but the circles in these stones are also, I am informed by Mr Stuart, made up of pits, and not of lines.

in Ireland, sculptured with cups and rings, and apparently, from the sketch sent to me, scratched over with many straight lines.

A series of most interesting sepulchral sculptures has lately been discovered by Mr Conwell, of Trim, upon the stones of an extensive group of ancient chambered cairns, reared upon the summits of a ridge of hills known as Sleive-na-Callighe, in the county of Meath. The cairns are circular externally; and internally the largest consist for the most part of small chambers and cists arranged in a cruciform shape, the narrow entrance passage representing the shaft of the cross. The chambers are formed by large flags set on edge, and rough pillar stones, while the roofs are made of overlapping and converging slabs. Many of the stones forming the walls of the chambers and cists are carved, most frequently by punched or picked work, and sometimes by scraping and the chisel; and so varied is the sculpturing, that no two stones are exactly alike. I am indebted to the courtesy of Mr Conwell for some sketches of them. Among the figures are numerous cup excavations, groups of concentric circles, with and without central depressions, the rings being sometimes complete, sometimes incomplete, and interspersed with volutes or spirals. But in addition to these figures, and freely commixed with them, are much more elaborate sculptures in the form of lunet-shaped, zig-zag, and straight lines; loops, arches, lozenges, and diamond or cone-shaped figures; dots, stars, and circles, with radiating rays; some quadrangular, triangular, and reticulated forms, devices like the stalk and fibre system of a leaf, &c. In the "*Meath Herald*" for 21st October 1865, Mr Du Noyer, an excellent Irish antiquary, compares some of these carvings at Sleive-na-Callighe to the figures of a wooden shield, of a gold torque, a two-wheeled chariot, a boat with high poop and stern, &c.

Within these ancient graves, the walls of which are so curiously carved, Mr Conwell has found many portions of burned human bones; with various relics and implements, as pieces of broken and very rude pottery; several round stone balls¹ of syenite and ironstone, &c.; the beads of a stone necklace; a white flint arrowhead, and some flint flakes; two or three hundred sea-shells, and rounded white sea-pebbles: an

¹ The late Dr Petrie had in his collection one of these balls, which he told me had been found within the sepulchral chambers of New Grange.

enormous collection of bone implements, as portions of bone pins, numerous broken pieces of bone tools and combs, many of them carved with figures, curved lines, and circles,—one of them containing the representation of a stag in crosshatch lines; besides hundreds of broken pieces of bone, levelled or smoothed apparently with cross lines, as if intended for carving; an ornamented bronze pin; one or two pieces of jet; and in the southern side crypt of one of the largest cairns, and near the entrance of the crypt, a few small amber beads, with portions of several small bronze rings, five or six fragments of glass and glass beads, a ring of iron about half an inch in diameter, an iron punch five inches long, with a chisel-shaped point and broadened head, and five or six other small corroded pieces of the same metal. The drawings in Plate XXVIII. are copies of the figures cut on some of the cysts or chambers; the last and lowest drawing being much more finished by the artist than the first, and giving a general view of the most elaborate crypt yet detected in this most interesting necropolis. A large stone basin was placed on the floor of the crypt.

I do not know whether the remarkable sculptures within the chambered cairns or tumuli of Sleive-na-Callighe should be regarded as earlier, or later, or contemporaneous with the diversified and decorative carvings which exist in Ireland on some of the stones of the gigantic old barrows that stand on the lower banks of the Boyne, a few miles above Drogheda. Several years ago I had an opportunity of visiting the great old necropolis there, and of seeing the megalithic interior of New Grange along with my friend, Sir William Wilde. From his admirable work on the Boyne and Blackwater, there is copied into Plate XXIX. a series of specimens of the sculptures cut on the stones of the tumuli of New Grange and Dowth.

Figure 1 shows the double spirals, &c., carved on the enormous curbstone that stands at the entrance to the passage or gallery of New Grange. This gallery, which is sixty-three feet long, leads into the high dome-roofed chamber which forms the centre. These volutes, like others in the interior of this vast sepulchral mound, are formed of a double coil, commencing with a loop. On this curbstone the lines are said to differ from those on our lapidary cuttings in Scotland and England by being apparently raised in relief, rather than incised. In

fig. 6 is represented a small portion of the edge of a lintel, which projects horizontally a short distance above and within the line of the present entrance of the gallery—carefully carved in lozenge and sandglass patterns—and with the lozenges partially dotted or pitted with minute pick work. The great interior chamber has three crypts or recesses leading off from it; and fig. 2 gives a view of the eastern crypt, which is slightly narrowed at its entrance, and has the stones composing its roof carved over with circles, volutes, and chevrons. These carvings have been executed after the stones were built into their present places, as the patterns pass from one stone to another. In the bottom of the crypt is seen—what existed in all the three recesses—an oval, slightly concave, stone basin. A similar stone basin of still larger size is represented in Plate XXVIII. as having been found in one of the crypts at Sleive-na-Callighe. In fig. 3 we have a more enlarged view of some of the markings in the eastern crypt,—the double spirals, in most instances, having seven turns. Fig. 7 shows another variation in the type of the cuttings, as seen on one of the blocks forming the roof of the same or eastern crypt. A leaf-like or fern pattern, cut upon the surface of one of the stones of the western crypt, is shown in fig. 4. A peculiar linear and angulated scroll, like a broken gridiron, is cut upon a stone facing the western crypt, and is reproduced in fig. 5. Several of the stones in this pyramid-like tomb have round cuttings upon them, which Sir William Wilde speaks of as small sockets or mortises (cups?), made “for the insertion of wedges, either to split the stones or lift them.”

When describing the sculptures of New Grange, Sir William Wilde states, that in Ireland, tomb-sculpturing or tomb-writing of similar characters “have been found in analogous megalithic tombs in the counties of Down and Donegal,” and in the great sepulchral mound at Dowth, about half a mile from New Grange. Several of the blocks forming an interior chamber at Dowth are carved like those at New Grange, and present no small beauty of design; but some of the patterns are different—as, for example, two selected in figs. 8 and 9, showing concentric circles around a central cup; a double ring with a crucial pattern in its centre—such as is not unfrequent in Scandinavian lapidary sculptures; another ring, with numerous straight star-like radii diverging from its outer surface (a common device upon the sepulchral stones at

Sleive-na-Callighe), and another double circle with straight lines cut below it, and straight lines and zig-zags placed over it.

The two Plates XXVIII. and XXIX. are given with the view of showing the highly decorative and ornamental style of some of these Irish lapidary sculpturings, as compared with the comparatively ruder and simpler, and hence in all probability earlier, cup and ring cuttings which are found on the archaic carved stones of Scotland and England.

CHAP. VII.—LAPIDARY SCULPTURINGS IN BRITTANY.

In Brittany, the lapidary carvings upon the stones of some of the ancient tumuli and cromlechs must perhaps be considered—from their distinct representation of various actual objects—as still more advanced than those of Ireland.

But the simplest sculpturings also are sometimes seen on the Brittany sepulchral stones; as, for example, six cups upon the inner surface of one of the roofing-stones of the elongated chambered tumulus of Mount St Michael at Carnac, and which,—sketched by the kind assistance of Mr Barnwell,—are copied into Plate XI. fig. 6, from an interesting essay of his in the “*Cambrian Archæologia*” for January 1864. My friend, Captain Thomas, informs me, that on a propstone of the dolmen of Mené-Lud at Locmariaker, he found eighteen small cups arranged in the form of “an irregular circle and a short straight avenue leading from it;” and I could not quote a more accurate and careful observer.

I have seen no account of any separate concentric ring cuttings having been observed on the Brittany stones, except the statement by Baron Bonstetten, that on the interior surface of the capstone in the dolmen or cromlech called “*Pierres Plates*,” at Locmariaker, there are cut-out circles or concentric discs, along with arched lines, leaves of fern, &c. Mr Barnwell tells me he has seen, on the “*Pierres Plates*,” central dots or cups and annulets cut out, similar in appearance to the figures given as the symbol of the sun in astronomical works and almanacs. Captain Thomas has shown me rubbings which he made of cups and rings arranged upon these “*Pierres Plates*” in rows, which are again inclosed in

surrounding settings of elongated lines. He did not find in Brittany a single example of any concentric rings with a radial duct.

But many of the Brittany stones are cut much more elaborately. Thus the blocks used in the construction of the gallery and chamber of the great sepulchral mound at Gavr Inis, in the *Morbihan*, are everywhere densely covered over with continuous circular, spiral, zig-zag, looped, and various other types of carving, as represented in sketches of three of the stones forming a portion of the entrance gallery copied into Plate XXX. fig. 1. The other stones forming the gallery, &c., of this magnificent monument are all carved in analogous styles,—except where the quartz blocks have apparently proved too hard for the tools of the sculptors. These Gavr Inis sculptures represent a still more elaborate type of carving than that seen at New Grange, &c. in Ireland;—and besides, they display on several stones the important addition of the outlines of actual objects, namely, triangular-shaped celts¹ and well-drawn snakes placed among the ornamental lines.²

In other large Brittany tumuli more perfect, though still rude, representations of various other objects have now been detected upon the component granite stones by M. Galles, and by the remarkable researches of Mr Samuel Ferguson, of Dublin.³ These gentlemen have lately discovered, upon the stones of the tumuli and cromlechs at Locmariaker, Isle Longul, &c., figures of various military weapons and arms, as battle-axes or hatchets (see Plate XXX. fig. 3), handled, and sometimes

¹ Dr Jameson has sent me a note of the figure of a celt or triangular “dagger,” cut out upon a tall monolith at Auchonear, in the Scottish island of Arran. The figure, he states, is about 9 inches long, and 3 inches broad, at its base, and points upwards. There are no other markings on the stone. This is the only celt figure in Scotland of which I have heard. Dr Jameson has kindly inspected for me all the other standing-stones and circles in Arran, without discovering any markings or toolings upon one of them. I found none on those which I examined in the adjoining island of Bute.

² One of the stones in the gallery at Gavr Inis is “holed” or perforated obliquely on its face, the entrance and exit of the artificial perforation—which admits the hand—being about fifteen inches apart. Each opening has a semicircle or half ring in relief surrounding it. I am indebted to Miss Young for an excellent sketch of this stone.

³ See the Proceedings of the Royal Irish Academy for 1864.

plumed,—bows, semi-circular and cross,—and oblong shields (see figs. 3 and 4); with some imperfect figures of animals. Many of these remarkable sculptures, it is to be remembered, were, as we shall see subsequently, found in sepulchres where abundance of stone weapons and objects were discovered,—but unaccompanied by any metallic instruments or ornaments.

In addition to these few remarks on the Brittany catacomb sculptures, let me add, that carvings also exist upon the stones of the open cromlechs in that country. In a celebrated cromlech at Lœmariaker, called the Merchant's Table, the head stone is cut with a succession of rows of long parallel vertical lines, straight in their middle, and curved at their extremities; and besides there are carved out on the inferior surface of the capstone,—and before it was placed *in situ*,—various lines, and specially the figure of an axe, with a long looped handle and a floreated head, as represented in Plate XXX. fig. 2.

Some of these Brittany sculpturings are raised, and not incised, like those which I have described on the Scottish and English sculptured stones; and hence in this respect, as well as from the objective character of the sculptures, they seemingly indicate a higher type of art.

The surfaces of the megalithic structures in other parts of France do not appear to have been yet examined with any great accuracy. M. Alex. Bertrand, in his "*Monuments Primitives de la Gaule*," states, that above two thousand "*dolmens*" (megalithic tumuli and cromlechs) still exist on the soil of France; 500 of them being in the department of Lot alone, and 500 in that of Finisterre. New discoveries in prehistoric sculptures are almost certain to be attained in this extensive archæological field.¹

¹ Lately, in his work upon the Antiquities of Poitou (*Epoques Antediluvienne et Celtique du Poitou*), M. Brouillet describes and figures some roundish and irregular excavations upon the capstones of several cromlechs in that neighbourhood, which he believes to be probably artificial; but they seem to me to be much more like the corrosions and destruction produced by weather and time. His observations upon the contents of various French cromlechs are more important. In the interior of several he found successive layers of human bones, separated by layers of flat stones. These bones were apparently all more or less bruised and often gnawed, and lay in regular anatomical order. No objects of metal were found along with them; but some pottery, bone weapons, and implements of flint and stone, were occasionally discovered within these cromlech sepulchres. In a preceding note at p. 24 I am

CHAPTER VIII.—LAPIDARY SCULPTURINGS IN SCANDINAVIA.

I am not aware that the active school of Archæology in Scandinavia has hitherto paid any special attention to archaic pre-lettered carvings upon stones and rocks. But amidst their antiquarian literature, specimens are incidentally alluded to of lapidary cup and ring carvings, which are interesting in relation to the present inquiry; and some forms of ancient sculptures, different from ours, and peculiar to Sweden and Norway, have long attracted the attention of the northern antiquaries. One or two specimens and figures of each kind will be sufficient to illustrate my meaning.

Cup markings exist on a granite block, known as Balder's Altar, Baal's or Balder's Stone, near Falköping, in Sweden. The stone is of a somewhat ovoid shape, about six or seven feet long, and three feet high. Its upper surface is covered with cups of different sizes. Four of the largest and four small cups form a row obliquely across the middle of the stone; and along the side of the block there is another row of such cups, like those on the Bewick Stone, figured in Plate XXV. fig. 3. "Such holes," observes Professor Nilsson, "are frequently found in large stones both in Sweden and abroad, and are supposed," he adds, "to have been made upon heathen (or Baal) altars, in order to receive part of the blood of the sacrifice"—an opinion in which he seems inclined to join. But the cups, in some of their positions, as upon the sides of the Balder and Bewick Stones, and upon the surfaces of erect monoliths, could never possibly contain any fluid.¹ I have had copied into Plate XXX. fig. 1, a sketch of the Balder Stone, as given by Professor Nilsson in his "Scandiniska Nordens Ur-Invänare," p. 133.

Concentric circles are figured by the same author in another part of the same work (p. 167), as cut upon a large standing stone on Asige

perhaps wrong in conceiving that M. Bertrand states there were not above a dozen out of the many hundred cromlechs in France which were "holed" or perforated in their props; for since reading M. Brouillet's remarks, I believe M. Bertrand probably refers to incomplete and doubtful holes (*trous*), and not to complete perforations.

¹ Professor Nilsson thinks that these cupped Baal altar stones became the earliest holy water stones when Christianity was first introduced into Sweden.

Moor, in Halland, Sweden. The stone is probably one which formed the side of a tall trilithon, like those in the middle circles at Stonehenge, but one stone is now prostrate; and near them stand, six feet apart, two similar stones, from fourteen to sixteen feet in height, above three broad, two in thickness, and flat on the top, where apparently a transverse impost was formerly placed. These great pillars are known under the name of "Haborg's Gibbet," or "Hanging Stones." The circles made on the standing stone are concentric, and six in number, as represented in the copy from Nilsson, given in Plate XXXI. fig. 2. Further, the circles are not cut in continuous lines, but as dots or pits, in the same way as some of the Irish stones. (See *ante*, p. 64.) In Nilsson's woodcut and brief description, there is no note of the presence of a central cup or radial duct. Remains of a megalithic avenue and large monoliths exist in the neighbourhood.

A sculptured cromlech in Denmark is described and figured by Axel Em. Holmberg in his "Skandinaviens Hällristningar," p. 79, and his sketch of it is copied into Plate XXXI. fig. 3. Among the many naked and mound-covered cromlechs of Denmark this is one of the very few that have been hitherto discovered presenting any appearance of tooling and carving. The cromlech in question is situated in the parish of Grevinge, in Zeeland. It was entirely concealed within an earthen mound or barrow, until it was accidentally discovered by adventurers searching for treasure, and now stands free and exposed. Some urns with tools and pieces of flint were found within its interior chamber, which is six feet high, and formed of six upright supports, covered by a large capstone. On the upper surface of this capstone are several figures, so slightly carved that they only become very distinct in a good light. These figures consist—1. Of two small circles, with a third and larger circle, each of them inclosing two lines, which cross or intersect at right angles; and 2. Of three very rude figures of ships, with crews varying from eight to twenty-four. There are three or four other imperfect linear markings on this capstone, which Holmberg¹ considers to be probably nothing but natural marks. "Some antiquarians," he observes, "look upon this monument as belonging to

¹ Skandinaviens Hällristningar, p. 80.

the very oldest age, when metals were unknown; and they believe, therefore, that the sculptures must have been done with stone. Others, and among them Professor Worsaae,¹ ascribe it to a later date, because the vessels contain more men than single-tree canoes or skin boats could hold."

Circles, containing within them two right-angled lines, in the form of an equal-limbed cross—like the circles on this Zeeland cromlech—are very common on sepulchral and other stones and objects in Scandinavia. Some northern archæologists conceive the figure to represent a shield or wheel; but others of them hold that it, and the "fyllot," or four-angled cross, are symbols of Baal or Woden.²

Very rude sketches of ships and crews, like those on this Zeeland capstone, have been found carved in great numbers on rocks in Scandinavia; and the age of the earliest and latest forms of these "hällristningar" has by no means been as yet determined. In the latest, the ship outlines are often mixed up with wheels, simple and crossed, rows and groups of cup-like excavations, one or two volutes, and many rude figures of armed men, animals, &c.³ Holmberg has published drawings of above one hundred and fifty of these "hällristningar," and each drawing contains several figures. Two boats with various accompanying figures were discovered a century or two ago sketched upon the interior stones of a chambered cairn at Kivik, and lately this Kivik tumulus has attracted much attention in consequence of a very learned and deeply respected Scandinavian archæologist—Professor Nilsson of Lund—maintaining that the figures are Phœnician in their origin, of the bronze age, and connected with the worship of Baal. Let us, therefore, for a moment consider this Kivik monument at somewhat greater length,—the more so as Professor Nilsson attributes this monument and our British ring sculptures to the same people and the same age.

The Kivik or Bedarör cairn is placed to the south of Kivik, in the county of Skåne, and district of Christianstad, Sweden, and stands about three

¹ Danmarks Oltid, oplyst ved Gravhøje, &c., p. 71.

² Holmboe, in the Christiania "Videnskabselskabs Forhandling" for 1860, figures several of these cross markings, and seems to look upon them as emblems of death.

³ For drawings of these "hällristningar," see Holmberg's work, and Dr Aberg, in the *Annaler for nordisk Oldkyndighed*, for Aaret 1839.

hundred yards from the shores of the Baltic. The great original size of the cairn cannot be now ascertained, as for many long years its stones have served as a quarry for the building of bridges, houses, walls, &c., in the neighbourhood. Before the middle of the last century its interior chamber was reached and examined. It measured thirteen feet in length, and three in breadth, and lay north and south. Its walls were found to be composed of upright stones or slabs, some of which were sculptured, others were not. Probably the chamber had been previously entered and harried, and two of the sculptured blocks were displaced. The chamber was roofed in above, not with flat slabs, but with large irregular stones of considerable size,—some of them laid edgewise, but sufficiently preventing the mass of small cairn stones placed above from falling in. The carved or sculptured stones lining the chamber were of granite, and on an average about four feet high, three feet broad, and eight or nine inches in thickness. The carvings upon them are rude and rough, yet confessedly graphic.¹ Various archæologists have discussed and figured these Kivik sculptured stones and sculptures, as Lagerbring,² Abrahamssen,³ Sjöborg,⁴ &c.; but I have drawn the notice and sketch of them (copied into Plate XXXII.) from Professor Nilsson,⁵ as the latest authority on the subject. He holds that the figures on most of the stones are symbolical or religious; while those on the two last (figs. 7 and 8) are more strictly historical, and represent a victory, or rather the rejoicings and human sacrifices following it; and he believes that the representations upon the carved stones of the cairn show the victors and its builders to have been worshippers of the eastern sun-god Baal.

A granite block stands at either end of the sepulchral chamber. The

¹ A second smaller chamber or cist, only four feet in length, has been discovered in the Kivik cairn; its stones are quite unsculptured. It lies south of the larger and sculptured chamber.

² Specimen Historicum de Monumento Kivikensi. Lond. Gothen. 1780.

³ Scandinaviskt Museum, 1803, p. 283–302.

⁴ Samlingar för Nordens Fornälskare, tom. iii. p. 142.

⁵ Die Ureinwohner des Scandinavischen Nordens I. Das Bronzealter. Hamburg, 1863. Lately Professor Nilsson has published, in the 4th volume of the Transactions of the Ethnological Society of London, p. 244, a remarkable essay on Stonehenge, as probably a Solar Temple of the Bronze Age. It formed originally a supplemental part to his "Bronsäldern."

stone at the north end (fig. 5) has no carving upon it. That at the south end (fig. 1) has cut upon it below, the outline of a crewless and perhaps defeated boat; and above it two bronze axes and two other weapons, perhaps javelin-points, on either side. Placed intermediately between these instruments is a cone or obelisk, which Professor Nilsson maintains, from various eastern emblems and evidence, to be a symbol of the Sun-god, who, he adds, "granted the victory by means of the arms here represented." Fig. 2 contains merely a rude outline of a vessel and its crew, such as exists so frequently on Swedish rocks. Fig. 3 represents four animals (horses) in a square or panel, with a series of straight and interlaced zig-zag lines, and lozenge-shaped squares, separating two of these animals above from the two below. Fig. 4 represents a cartouche or panel, ornamented with zig-zag lines, and containing within it two quartered discs,—or, in other words, two circles, each with two inclosed cross-lines. Fig. 5 shows another panel, inclosing two quartered discs below; and two crescents above, with a horned or spiral line passing upward out of each end of the crescent. Professor Nilsson, and those who argue for the eastern origin of these symbols, find an emblem of Baal or the Sun-god in the obelisk, in the horses, and in the quartered circles or discs, and an emblem of the Moon-goddess in the crescents and horns.

The two next sets of sculptures are, as already stated, more historical. The first of the two, fig. 7, seems to represent in its first line a warrior in his double-horsed chariot, preceded by prisoners, who appear to have their hands tied behind their backs, and to be guarded by a person holding a raised sword; on the second line are two horses opposed to each other, and a boat(?); and on the third line is a row of men dressed, according to Professor Nilsson, in flowing priestly costume, and who walk in procession after a person holding on high a quadrangular implement or banneret in his right hand. Fig. 8 is more elaborate still. Its first line consists of a procession, which Professor Nilsson considers as a continuation of the conqueror's festival procession in the first line of fig. 7. First, there are two musicians, apparently playing upon large horns; a third holds a squared instrument like the figure in fig. 7; a fourth personage has his limbs, according to Professor Nilsson, set for dancing; and the two last play upon a kind of suspended double

drum or "tympanon," a form of musical instrument which Nilsson holds to have been known to the Israelites and Egyptians in the East. The second line seems to consist of priests, advancing to an altar in the midst of them; while the third line contains, apparently in different attitudes, two small groups of the prisoners, with their hands bound behind their backs,—attended by a keeper with a drawn sword,—and having two circles incomplete, and with angled extremities,—like two inclosures or prisons,—for the reception of the captives.

Professor Nilsson, while believing this cairn at Kivik to have been erected in commemoration of some victory—probably a naval one—by worshippers of the eastern sun-god Baal, holds, further, that it is a monument which belongs certainly to the bronze age; although human figures, and any other objects,—except geometric circles and lines,—are rarely found on stones and implements of the bronze period. Farther, he believes—as we shall see in a subsequent chapter—that all the traces of Solar or Baal worship hitherto discovered in Scandinavia have been invariably found in connection with the bronze era; and on the Kivik monument he conceives that the long-flowing dresses of the priests are such as we would expect from the account of the peculiar vestments, mantles and pili, of the worshippers of Baal, as given by Herodian, Lucian, &c.

It is perhaps proper to add, that Professor Nilsson, like Mr Münter,¹ considers the two last Kivik stones (figs. 7 and 8) to represent an immolation of some of the vanquished, as sacrifices for the victory obtained, and that the priests are assembled around the altar or cauldron for that purpose. The immolation of prisoners of war was a practice followed among some old nations. When Carthage, originally a Phœnician city or colony, was besieged by Agathocles, the inhabitants sacrificed two hundred boys of the highest descent as burnt-offerings; and afterwards, when they had obtained the victory, they immolated the most beautiful captives in like manner (Diodorus xx. 14,565). We know from this and various other sources that the Phœnicians or Canaanites, and the worshippers of Baal, had no remorse against the barbarous sacrifices of the infants and subjects even of their own

¹ *Antiqvariske Annaler*, Copenhagen, for aar. 1815.

race¹. While conducting their sacrifices, some of the priests of Baal seem to have jumped or danced,² as Nilsson believes to be the act in which one of the personages or priests in the first line of fig. 8 is engaged; and perhaps each individual with the upraised four-sided instrument in figs. 7 and 8, may be looked upon as occupied in an analogous manner.

Professor Nilsson makes one critical remark on the position of the figures on the last two stones, which seems worthy of quotation. The figures are arranged on the slabs from right to left, and are only intelligible when taken in this order. They form, as it were, a writing in figures instead of letters, and in doing so, they followed the course of Phœnician and other Semitic documents in reading from right to left, instead of from left to right.

Such sketches as are cut on the Kivik stones are not unique in Sweden. Professor Sjöborg³ has described a very heavy flat stone, a relic of another

¹ Professor Nilsson alludes to the large double drum or instrument, represented in the first line of slabs (fig. 8), as the eastern "tympanum." He does not advert to the circumstance, that our best Hebrew scholars derive the name of Tophet from the Hebrew word "Toph," signifying the drum or tabret, beaten to drown the cries of the human victims. See Milton's allusion to this in "Paradise Lost:"—

"Though for the noise of drums and timbrels loud,
Their children's cries unheard, that passed through fire
To his grim idol."

It is well known that Tophet, or the valley of the son of Hinnom, placed near one of the gates of Jerusalem, was long noted for the sacrifices to Baal, perpetrated at it by the Israelitish followers of the Phœnician gods, who there burned "their sons and daughters in the fire" (see 1 Kings xxiii. 10, and Jeremiah vii. 31). Hence the title of the place is commanded to be altered to the significant name of "the valley of Slaughter" (Jeremiah vii. 32, and xix. 5, 6).

² About 900 years before the commencement of the Christian era, we find, in 1 Kings xxvii. 26, that the priests of Baal "leaped upon the altar which they made," an expression which Pyle, Patrick, Gotch, and other commentators, hold as meaning in the original, they "danced about the altar." Professor Nilsson cites the opinion of Dr H. M. Melin to the same effect. Herodian, in his History (Lib. v. cap. 3, 5), states that, under Heliogabalus, the worshippers or priests of Baal danced around the altar of the sun-god, in the Phœnician manner, to the music of drums, cymbals, and other instruments.

³ Sammlung für Nordische Alterthumsfunde, vol. iii. p. 146.

Swedish tumulus at Willfara, and cut with rough representations upon it, like those at Kivik, of a two-wheeled chariot, drawn by a pair of horses, three boats, and about a dozen cup excavations. That these excavations were, however, of an older date than the objective figures is proved by one simple fact. A line forming the side of one of the ships traverses one of the cups, and cuts its way along the concavity or bottom of it, so far proving that the cup marking was older than the line marking. In digging into the barrow, from which apparently this stone had been taken at Wallfara, Professors Sjöborg and Nilsson found a very perfect flint knife and a small piece of bronze ornament.

The school of sculpture that carved these Kivik figures is one which we naturally surmise to be much more advanced than that simpler and more primitive school which was content with cutting only the rude lapidary rings and cups which form the subject of the present memoir; and whatever may be the age at which the Kivik sculptures were cut, the age of the lapidary circles and cups in Scandinavia and in Britain must, I believe, be allowed by all to be at least either still more remote and archaic in point of time, or carved by a ruder race.

Let me here add, that the search after cup and ring cuttings in our own country has been only recently begun; and in the course of a few years many more specimens of them will doubtlessly be discovered. But the search for them among the archaic remains of distant countries in Europe, and in other divisions of the Old and New World,¹ will probably bring to light many new facts, both as to the sculptures themselves, and as to the ethnological relations which possibly they may help to prove among different portions and localisations of the human race.

¹ I have heard of cup markings in Switzerland. Miss Paterson, of Leith, a keen and accurate observer, saw some markings on stones behind Smyrna, in Asia Minor. In the bed of a winter torrent at Bournabat, seven miles beyond Smyrna, she discovered a large boulder, with several concentric circles on it, similar to drawings of lapidary circles which she had seen in my possession before leaving Edinburgh.

PART IV.

GENERAL INFERENCES.

In reference to the lapidary concentric ring-cuttings and cup-cuttings in Scotland, &c., I will take the liberty of adding a few general observations about their possible import or meaning, their date, &c.

CHAPTER IX.—IMPORT OF THE RING AND CUP SCULPTURES.

Of the real objects or meaning of these stone-cut circles and cups we know as yet nothing that is certain. They are archæological enigmata which we have no present power of solving; lapidary hieroglyphics and symbols, the key to whose mysterious import has been lost, and probably may never be regained. But various doctrines and hypotheses which have been proposed as to their origin and object necessarily require more or less consideration on our part.

They have been supposed, for instance, by the Rev. Mr Greenwell, Sir Gardner Wilkinson, Dr Graves, and others, to be archaic maps or plans of old circular camps and cities in their neighbourhood, telling possibly of their direction and character—"such (observes Sir Gardner Wilkinson) as are traced in time of danger by the Arabs on the sand to guide the movements of a force coming to their direction" (*Journal of British Archæological Association* for January 1860, p. 109). But I believe this idea has now been abandoned as untenable by some, if not by all, of the antiquaries who first suggested it.

The carvings have been held by some as intended for dials, the light of the sun marking time upon them,—or upon a stick placed in their central cups,—and its shadow corresponding with one of the central radial grooves; but they have been found in localities which neither sun nor shadow could reach, as in the dark interiors of stone sepulchres and underground houses. Others have regarded them as some form of gambling table; but they occur on perpendicular and slanting, as well as flat rocks; and besides, if such were their use, they would scarcely have been employed to cover the ashes of the dead.

I have heard them spoken of as rude representations of the sun and stars, and of other material and even corporeal objects¹ of natural or Sabeian worship; but all attempts to connect the peculiar configurations and relations which they show with any celestial or terrestrial matters have as yet confessedly failed. Nor have we the slightest particle of evidence in favour of any of the numerous additional conjectures which have been proposed,—as that these British cup and ring carvings are symbolic enumerations of families or tribes; or some variety of archaic writing; or emblems of the philosophical views of the Druids; or stone tables for Druidical sacrifices; or objects for the practice of magic and necromancy.

My friend Mr Dickson of Alnwick has, in some archæological observations relating to the incised stones found upon the hills about Doddington, Chatton, &c., “suggested that these carvings relate to the god Mithras (the name under which the sun was worshipped in Persia), that about the end of the second century the religion of Mithras had extended over all the western empire, and was the favourite religion of the Romans,” a system of astrological theology; that in the sculptured Northumberland rocks the central cup signifies the sun, “the concentric circles, probably the orbits of the planets;” and the radial straight groove “the way through to the sun.” In consequence, Mr Dickson holds these rock sculptures to be “the work of the Romans, and not Celtic,” having been cut, he supposes, as emblems of their religion by Roman soldiers near old British camps, after they had driven out their native defenders. But if they were of Roman origin, they would surely be found in and around Roman stations, and not in and around British localities—in Roman graves, and not in old British kist-vaens. The fact, however, is that they abound in localities which no Roman soldiers ever reached, as in Argyleshire, in Orkney, and in Ireland. And possibly even most of them were cut before the mythic time when Romulus drew his first encircling furrow

¹ Two archæological friends of mine—both dignitaries in the Episcopal Church—have separately formed the idea that the lapidary cups and circles are emblems of old female Lingam worship, a supposition which appears to me to be totally without any anatomical or other foundation, and one altogether opposed by all we know of the specific class of symbols used in that worship, either in ancient or modern times.

around the Palatine Mount, and founded that petty village which was destined to become—within seven or eight short centuries—the Empress of the civilised world.

Some archæologists have attempted to carry back the lapidary cuttings to the influence of an eastern race, who appear to have known the west, and perhaps the north, of Europe, for several centuries before Rome even was founded, and who are imagined to have cut the lapidary rings, not for the worship of the Persian god Mithras, but of the Phœnician god Baal. From its novelty and peculiarities this theory requires a more detailed consideration from us than any of the preceding suggestions.

CHAPTER X.—THEIR ALLEGED PHŒNICIAN ORIGIN.

The chief supporter of this theory of the Phœnician origin of the cup and ring cuttings is the eminent Swedish archæologist, Professor Nilsson, to whom I have already referred in chap. viii. He holds that the Druidism or Druidical worship, which Julius Cæsar found prevalent in Gaul and Britain at the time of his invasion of these countries (*viz.*, upwards of half a century before the Christian era), was a form of religion that never reached Scandinavia, and which at that time was—relatively, at least—recent in England and France, being only, perhaps, two or three centuries old, and fundamentally a younger type of a more ancient and oriental creed. For he believes that anterior to Druidism in Britain there existed here, and in the north of Europe,—as a result of Phœnician commercial intercourse and colonisation,—a form of eastern Solar worship; that our megalithic circles, &c., were reared by these Sun worshippers, and not by the Druids—for in none of the classical notices of Druidism are these stone circles ever distinctly alluded to, whilst they exist in many countries where neither Celt nor Druid was ever known;¹ that Stonehenge, Abury, &c., were erected as Sun

¹ Stone circles have been found in almost every country in the old world, from Greenland southward. Nor are ancient circles of this kind wanting even in Australia. My friend, Mr Ormond, informs me, that he has seen many, especially in the district near the Mount Elephant plains, in Victoria. “The circles (Mr Ormond writes me) are from ten to a hundred feet in diameter, and sometimes

temples to the Phœnician Sun-god, Baal; and that our lapidary ring-cuttings on the stones of New Grange and Dowth, and upon the rocks of Northumberland, &c., are also the work of these Sun worshippers, and were cut for the purpose of symbolising the sun;—the single central cup and central ring indicating the solar luminary, and perhaps each additional circle afterwards added around this solar figure, recording and honouring—as he suggests—the death of some near relative.¹ Professor Nilsson further maintains that this supposed Solar worship in Western and Northern Europe prevailed during the Bronze era; and that circular or concentric figures and designs upon ornaments, implements, weapons, &c., are invariably associated in these European countries with the Bronze age, and consequently with the era of Sun worship,—except where they have descended, and been adapted to articles of the Iron age, as designs which were ornamental merely, and without any inner signification.²

In relation to these opinions let me here observe, that it seems to be a fully established fact in ancient history that, on the shores of the Atlantic Ocean, the Phœnicians founded Gadir, Gadeira, or Gades (Cadiz),³ about

there is an inner circle. The stones composing these circles, or circular areas, vary in size and shape. Human bones have (he adds) been dug out of mounds near these circles. The aborigines have no traditions regarding them. When asked about them, they invariably deny knowledge of their origin."

¹ See his *Skandinavisk Nordens Ur-Invånare*, p. 143.

² Professor Nilsson has published at length his observations on the early Phœnician intercourse and colonisation of Western and Northern Europe in the essays already referred to at p. 73, *ante*.

³ For the special historical data proving the date of the founding of Gadeira, see Mr Kenrick's scholarly and learned history of "Phœnicia" (p. 125, &c.), or the more extended work, "*Die Phœnizier*," of Professor Movers of Breslau, vol. ii., p. 147, &c. "The foundation," remarks Mr Kenrick, "of Gades by the Tyrians, twelve centuries before Christ, is one of the best attested facts of such ancient date" (p. 209). In Strabo's time (20 B.C.), Cadiz, which, after six or seven centuries, had become a Carthaginian, and ultimately a Roman conquest, was still, according to him, a city second only to Rome in population; and, as a proof of the extent of Phœnician colonisation in Southern Spain, he states (iii. 11, § 13), that "the whole of the cities of Turdetania and the neighbouring places" in the Spanish Peninsula, were in his days inhabited by the Phœnicians,—including under that term, as he always does, the inhabitants of Carthage, as well as those of Tyre and Sidon. See

eleven or twelve centuries before the commencement of the Christian era; and this colony or city was not perhaps, by one or two centuries,¹ the earliest of the many Phœnician settlements² established upon the coast of Tartessus, Tarshish, or Southern Spain. We know that the powerful and wealthy city of Tyre, "the crowning city," whose "merchants are princes," and itself "a mart of nations" (according to the striking language that, seven or eight centuries before Christ, Isaiah uttered in regard

also Mr Grote in his *History of Greece*, vol. iii. p. 374, as to these towns being "altogether Phœnicised." Strabo mentions (iii. 11, § 6), that the largest merchant ships which in Roman times visited the ports of Naples (Dicæarchia) and Ostia were the ships of Turdetania—representatives, as they were, of the ancient "ships of Tarshish," a name given to large vessels in ancient Biblical times, apparently on the principle that all commercial ships of unusual size were, in Great Britain, thirty or forty years ago, called "East Indiamen," whether they traded eastward or not.

¹ "Phœnicia," observes Mr Kenrick, "had, no doubt, been enriched by intercourse with Tartessus during the [anterior] period of the ascendancy of Sidon, before any attempt was made to obtain a permanent establishment there" (p. 124). The mention of Tarsis as a gem in the breastplate of the Jewish High Priest (Exodus xxviii. 20), shows that precious stones were already imported from Spain to the East as early as about fifteen centuries B.C. (see Kenrick's *Phœnicia*, p. 118, and Professor Mover's "Die Phœnizier," Band ii. p. 592). "We are therefore, surely," observes a cautious and critical writer, Sir John Lubbock, "quite justified in concluding that between B.C. 1500 and B.C. 1200 the Phœnicians sailed into the Atlantic and discovered the mineral fields of Spain and Great Britain" (see his *Prehistoric Times*, p. 46). Homer represents Sidon as abounding in works of bronze (ἐν Σιδῶνι πολυχάλκῳ) at the era of the Trojan war (Odys. xv. 424).

² "Scylax (c. 1), whose Periplus was composed about 340 B.C., mentions," observes Sir Cornewall Lewis, "many factories of the Carthaginians to the west of the Pillars of Hercules, apparently on the European side."—(*Astronomy of the Ancients*, p. 449. See also Strabo in Note 2, p. 82, *ante*) Eratosthenes speaks of the coasts of Mauritania (southward from Cadiz and the Straits of Gibraltar), as containing in early times 300 Phœnician settlements (see Kenrick's *Phœnicia*, p. 135; and Grote's *Greece*, vol. iii. p. 367). Sir Cornewall Lewis lays down the voyage of Hanno, whose Periplus is extant, as being partly for the foundation of colonies, and partly for discovery. "He is supposed," adds Sir Cornewall, "to have sailed along the [Atlantic] coast as far as Sierra Leone, and according to the best considered conjecture, his expedition took place about 470 B.C."—(*Astronomy of the Ancients*, p. 454). The Rev. Isaac Taylor, in his work on "Words and Places," points out Phœnician names running along the Atlantic coast of Africa (p. 39. See also Mover's "Phœnizier," vol. ii. p. 534).

to it), had in her fairs—as Ezekiel witnesses, about 600 years B.C.—“silver, iron, tin, and lead,” from Tarshish; and further, that Tarshish was then her merchant, “by reason of the multitude of all kinds of riches” (Ezekiel xxvii. 12). Further, there is the greatest probability, if not certainty, that the tin—alluded to in Ezekiel—which was sometimes used as a metal by itself,¹ but which was far more indispensably necessary in the formation of bronze²—one of the most valued and popular metals in these and in still more ancient times³—was derived either from the

¹ *Tin by itself*.—In ancient times tin seems to have been used sometimes by itself, as well as in the form of alloy. The earliest separate mention of it as a metal is about 1450 B.C., when it is enumerated among the spoils taken by the Hebrews from the Midianites (Numbers xxxi. 22). Homer describes Agamemnon’s corselet as containing twenty rods or bars of tin (*Iliad*, xi. 25), and his shield as showing twenty bosses of the same metal (*Il.* xi. 34). The greaves of Achilles were made, we are told, of ductile tin (*Il.* xliii. 612, and xxi. 592), and his shield is represented as having been welded of five layers, the two innermost of which were of tin (*Il.* xx. 271); while some of the devices moulded upon its surface were formed of tin, as the fence round the vineyard (*Il.* xviii. 564). Tin is represented also by Homer as entering into the composition of the chariot of Diomedes (*Il.* xxiii. 503). In ancient times, let me add, it was not always employed in the formation of bronze and metallic implements. Thus, it has been lately ascertained that the glaze of the bricks of Babylon and Nimrod contain an oxide of tin; and these bricks are supposed to have been made about six or eight centuries B.C. (see Kenrick’s *Phœnicia*, p. 455).

² Bronze generally contains about 88 or 90 per cent. of copper, and 10 or 12 per cent of tin. “It is remarkable,” observes Mr Kenrick, p. 213, “that the same proportions result from the analysis of the bronze instruments found in the sepulchral barrows of Europe, of the nails which fastened the plates with which the treasury of Atreus at Mycenæ was covered, and of the instruments contained in the tombs of ancient Egypt. . . . In the mirrors of the ancient Etruscan tombs the proportion of tin is sometimes as high as 24 or even 30 per cent.” (See more instances of the composition of ancient bronzes in Smith’s *Dictionary of Greek and Roman Antiquities*, 2d edit. p. 25.)

³ In our English Bible, the Hebrew word “nahas,” signifying bronze, has been translated brass. But brass, a metallic alloy of copper with zinc, was probably little, if indeed at all, known in these ancient times, as one of its components—zinc—seems to have been undiscovered (see Dr Percy’s *Metallurgy*, Part i. p. 519). Some of the Biblical notices of the use of bronze—and hence of the import of tin—are both early and remarkable. Shortly after the Israelites left Egypt, about 1490 B.C., the women gave up the mirrors of polished bronze which they had brought from Egypt

streams and mines of Spain, or the far richer stores of Cornwall, or the Cassiterides;¹ and that the Phœnician amber trade was conducted from a

(see the composition of Egyptian bronze in preceding note) to form the brazen laver (Exodus xxxviii. 8); and at the building of Solomon's temple, about 1000 B.C., the Phœnician metallurgists cast, of bronze, enormous pillars, a molten sea supported by twelve oxen, lavers upon wheels, &c.,—works which would test the skill of the best modern artificers in metals.

¹ TIN, *whence derived in ancient times*.—Till some later discoveries in metallurgy, only two or three portions of the earth were known to contain tin in any available or marketable quantity, namely, first, Banca, and other adjacent islands in the Straits of Malacca, in the East Indies; secondly, Drangiana or Sejestan, Persia; thirdly, Spain and Portugal; and fourthly, the Scilly Isles, Cornwall, and the adjoining part of Devonshire. From which of these localities was the tin which was used in ancient times derived?

First, We have the very best reason for knowing that in former times the tin used by the civilised nations that were spread along the shores of the Mediterranean was not derived from Banca or the East. In Arrian's "Periplus of the Erythræan Sea," we have recorded with all the minutiae of a modern invoice the exact articles of traffic carried backwards and forwards between Egypt, Ceylon, Africa, India, &c., some eighteen centuries ago. In these authentic documents we have various notices of tin as a recognised article of merchandise. We find it, for example, as an article of commerce at the following emporia, namely, Canê, on the southern coast of Arabia; Barygaza, at the mouth of the Nerbudda (north of Bombay); and at the port of Bacaré, on the Malabar coast. But then, at these points, instead of being carried from the East to Egypt, it is invariably entered in them as exported from Egypt to them. The trade in tin at these parts is from the West to the East, and not from the East to the West, though in this latter direction, in these invoices, we have articles entered from the farthest parts of India, and even from China. If tin had in ancient times ever been brought commercially from Banca—where the supply is abundant—the knowledge of the locality of such a rich and valuable commodity would never have been lost.

Secondly, Strabo, writing about 20 B.C., states regarding the district of the Drangê:—"Tin is found in the country" (Book xv. chap. 11, § 10); but, according to his able translators, Messrs Hamilton and Falconer, "none is said to be found there at the present day" (see Bohn's edition, vol. ii. p. 126.) We have no authority, so far as I am aware, except that of Strabo, as to tin being found in Drangiana, a district at the eastern end of the present kingdom of Persia. At all events, it had not been found in quantity enough to have been sent down within the century after Strabo wrote to India to interfere with the tin traffic from Alexandria and the west of Europe to India, as described by Arrian in the preceding

point still further to the north—both forms of merchandise being chiefly or entirely carried by the seaward route through the Straits of Gibraltar, till at last the land and river routes from the Germanic and Atlantic Oceans to the Mediterranean became more opened up. And we must not forget, that a nation which—besides navigating her vessels to Malta, Sardinia, the Balearic Isles, and other parts of the Mediterranean Sea—traded to Tartessus, some 2500 miles from home, would have comparatively no insurmountable difficulty in reaching the southern parts of Britain. Indeed, when we consider the first and leading fact, that this most active commercial and marine people had factories and colonies, that proved rich and thriving, and some of which were planted on the Atlantic shores of Spain, at the least 1100 or 1200 years B.C., it seems hardly possible to resist the second and resultant fact that, during the course of the long centuries which they thus spent on one part of the Atlantic ocean, the same innate energy, and the same irrepressible love of enterprise, would induce, if not compel, the same people to visit with their vessels

paragraph. Nor, several centuries earlier does the tin of this country seem to have been worked to any considerable extent, as we find no notice of it in Ezekiel's description of this merchandise of that "mart of nations," Tyre, 600 B.C.

Thirdly, Spain and Portugal contained in former times, and contain still, a small quantity of tin, both in streams and lodes. But at the present day they furnish an extremely small quantity of that metal, and probably in ancient times never furnished any great supply. In the two last London Exhibitions specimens of Spanish or Portuguese tin were shown; and Mr Forrester tried to work it in Galicia, but, I believe, has given up the enterprise; and Dr George Smith (in his able essay on the Cassiterides, pp. 1 and 46) shows from official information that there is little or no tin-mining now in the country, and that Spain never appears to have produced any considerable quantity of this metal.

Fourthly, Cornwall and Devonshire.—Dr Smith points it out as an axiom in tin-mining, that "wherever tin has been produced in any considerable quantities within the range of authentic history, there it is still abundantly found" (p. 45). In the last year's return from the tin mines in Cornwall, the quantity raised is reported to be as great as it was ever known to be in any one year. No doubt these British mines were, as pointed out by Strabo, Diodorus, and other ancient authorities, the great source of tin from the earliest historic periods. It is remarkable that in olden times we have no allusion to any want or scarcity in the production of this metal; and the quantity used in the bronze age must have been very great indeed.

the coasts of that same ocean, and its nearest islands, such as Britain. Indeed, to reach the Eider or shores of the Baltic¹ for its electron or amber,² or even the northernmost part of Norway or Thule, was not so

¹ Professor Nilsson holds that, probably, the Phœnicians traded as far north as the celebrated fishing-grounds in the Lofoden Isles, within the arctic circle, bringing from thence fish, furs, &c. The fires of Baal were lit till lately at Beltane time in some of these islands. That fish was a great article of merchandise among the Phœnicians we know historically from different points, and from their coins, &c. They had stations for making salted provisions, as at Mellaria, in Spain, &c. (Strabo iii. 18). Incidentally we learn that the Tyrians had a fish market at Jerusalem in the time of the prophet Nehemiah, or about 440 B.C. (Nehemiah xiii. 16).

² AMBER.—Pliny (xxxvii. 11) tells us that the word "Electron" or Amber was applied in ancient times to our common bituminous amber (which—as he long ago hinted—naturalists now regard as probably the gum or product of a primeval pine); and secondly, to either a natural or artificial mixture of about four parts of gold to one of silver,—an alloy, perhaps, showing some of the colour or appearances of amber. Some very early notices of amber occur, as in the *Odyssey* of Homer (iv. 73, xv. 460, and xviii. 296). In the two last of these passages the amber was in pieces, and the use of the plural shows that it was probably not a metal. In the first passage the amber is represented as brought to the island of Syria by a Phœnician ship, before the breaking out of the Trojan war. Some centuries later, about 450 B.C., Herodotus describes amber, as in his time, one of the things imported, like tin, from the western extremities of Europe, as their only known source—a description that can apply to common bituminous or vegetable amber alone, and not to any alloy of gold and silver, the elements of which abounded around them in Greece. Herodotus states that the story of his day was, that amber came from the river Eridanus, which opened into the Northern Sea (iii. § 115). The shores of the Northern Sea or German Ocean along the western coast of Denmark have always served as the principal source of the amber trade; and in his late learned disquisition on the subject, Professor Werlauf of Copenhagen states (*Bidrag til den Nordiske Ravhandels Historie*, p. 91) that though the coast has become greatly changed and washed away in the course of centuries, yet the shores and mouth of the Eider, in Holstein—in all probability the old Eridanus—and the islands opposite it, have, up to our own time, supplied this bituminous substance in the greatest quantity, though it is cast up also upon some other beaches after rough weather. Pliny states that it was latterly brought overland from the shores of Prussia to the head of the Adriatic, and hence to southern Europe; but this appears not to have occurred till the time of the Roman Emperors, or many centuries after it had been carried seaward into the Mediterranean from the shores and isles of the German Ocean (xxxvii. 11. 3). In early times there may have been land routes across Europe for such light and

long a voyage from Tartessus, as Tartessus originally was from the parent cities of Sidon or Tyre.¹

valuable commerce, which we cannot now easily trace. Pytheas, the Massilian astronomer and traveller, who calculated, with his gnomon alone, the latitude of Marseilles within a few seconds only of correct time, voyaged, passing by the Straits of Gibraltar, about 350 B.C., to Britain and Northern Europe, and first described to his unbelieving contemporaries and successors Thule as a district or island on the Norwegian coast, as far north as the 66th degree of latitude. He tells us that in the islands where the amber was obtained, there was an estuary (*æstuarium*) of the ocean, implying an ebb and flow of the sea,—such as, of course, occurs on the coast of the Germanic Ocean, but which could not possibly hold true in regard to the waters and shores of the Baltic. (See Pliny xxxvii. 11; Nilsson, p. 71; and Humboldt's *Cosmos*, vol. ii. note 171). He states that Thule and other neighbouring seas contain neither earth, air, nor water separately, but a concretion, which he had himself seen, of all these, resembling marine sponge or jelly-fishes, which he was told could neither be travelled over nor sailed through (see Strabo ii. chap. 4 § 2). This description is now acknowledged to apply exactly to the appearance put on by the circular pieces of sludge or young ice, when the freezing of the Northern Sea threatens to begin. (See Nilsson's "*Nordens Ur-Invanare*," p. 140, and Sir John Lubbock's "*Prehistoric Times*," p. 42.) And his allegation, that he reached a northern mountain in Thule where the nights were only two or three hours long, and where the barbarians showed him the place in which the sun lies in bed (*ὅπου δ' ἡλίου κοιμᾶται*), is an observation which Professor Nilsson of Lund, in the present century, has confirmed; for the inhabitants of Dunö showed him exactly in the same way a hill-top from which the sun was visible the whole of midsummer night, repeating to him the observation which had been made to Pytheas between two and three thousand years before (p. 74). Yet these two observations, and others, of Pytheas, have induced many literary men in his own, and even in later times, to look upon him as telling traveller's fables. Pytheas states about amber, that at the place where it was obtained it was sometimes found in such great quantity that it was burned as a light—an occurrence which, according to Werlauf (p. 42), has happened also in later times amongst the inhabitants of Western Slesvig. From the electrical power which amber possesses of attracting light substances, the Greek philosopher Thales argued, according to Diogenes Laertius, that it was endowed with a soul; and as Thales lived above six hundred years B.C., the specimens of amber which he saw and experimented upon in Greece could not have reached there by the Massilian land route, which did not then exist, but it must in all probability have been carried thither from the western extremities of Europe by ships which possibly had been already engaged in the far distant amber and tin trades for centuries before.

¹ *Phœnician Navigation*.—It seems only idle to argue, as some have done, that the

But there are strong objections against the triple idea of Professor Nilsson, that (1) the age of bronze in western and northern Europe is (2) the age of our Megalithic circles, and that both are (3) the direct effects of Phœnician influence and colonisation among us.

It appears, for example, difficult or impossible to explain why the Phœnicians should not have introduced into western and northern Europe both iron and bronze, or iron as well as bronze. They early possessed both metals, and worked in both. They exported both from Tarshish. Ten centuries before Christ, the Phœnician craftsman sent from Tyre to Jerusalem was skilful to work in iron as well as in gold, silver, and bronze—as stated in the letter of King Hiram of Tyre to king Solomon in 2 Chronicles ii. 14. Four or five centuries earlier, or about 1440 B.C., the Canaanites (and the Phœnicians, if not, as many good ethnologists hold, of the same race, and only “Canaanites by the sea,” were at least their nearest neighbours) had apparently abundance of iron and iron implements (Joshua xvii. 16, and Judges i. 19). Jabin, king of the Canaanites about 1300 B.C., had as many as “900 chariots¹ of iron” (Judges iv. 3 and 13); and mention of the possession of such chariots by the Canaanites is made about a century and a half previously (Joshua xvii. 16). Besides, iron was used for many and various other purposes by the early Israelites,² Assyrians,³ Greeks,⁴ &c.

voyages of the Phœnicians were all coasting cruises in sight of land,—seeing we know for certain that they constantly crossed the Mediterranean Ocean to Malta, Sardinia, &c., where no land was visible for many long days, guided probably by the sun by day, and using, it is alleged, during the night the fixed stars “Cynosure,” or the Little Bear, as a means of directing their course (see Kenrick’s *Phœnicia*, pp. 235, 236),—means which, I am assured, modern navigators still occasionally employ,—especially when their compasses go wrong, an occurrence not very unfrequent in iron-built ships.

¹ In the time of Isaiah, or 600 B.C., “there was in the land no end of their chariots” (Isa. ii. 7). Yet, in accordance with the desolation of the land and its highways, predicted thirty-three centuries ago (see Leviticus xxvi. 32, and again Isaiah xxx. 8), there does not exist at the present day, in any part of the Holy Land, “such a thing as a single wheeled carriage” of any sort, “*not even a wheelbarrow*” (see Dr Robert Buchanan’s “*Clerical Furlough*” in 1859, p. 93). “Roads for wheeled carriages,” observes Dean Stanley, “are now unknown in any part of Palestine” (“*Sinai and Palestine*,” p. 134).

² Thus iron was employed in the construction of various implements and instru-

Perhaps, however, the marked prevalence of tools, implements, and ornaments of bronze, in northern and western Europe—as specially proved to us in our grave-diggings—before the introduction to any notable extent of articles of iron, is explicable by the same circumstances—whatever these circumstances may be¹—which led in the East

ments (see Numbers xxxv. 16); for hewing tools (Deut. xxvii. 5); for axes, agricultural instruments, and saws (Deut. xix. 5; 2 Kings vi. 5, 6; 2 Sam. xii. 31; 1 Chron. xx. 3); for nails for the doors of the gates of the temple (1 Chron. xxii. 3); for spear-heads and weapons of war (1 Sam. xvii. 7, where it is stated that Goliath's spear-head weighed 600 shekels of iron). Mines of brass and ironstone are mentioned in Deuteronomy viii. 9. The 28th chapter of the book of Job proves the high degree of perfection to which the art of mining had reached in his day, for we have in this chapter, says Mr Kenrick, “a complete description of the art of mining—tunnelling through the rock by artificial light, the construction of adits, shafts, and water courses, whether for obtaining a stream or for draining the mine, and the application of fire to separate the metal from the ore.” (See his *Phœnicia*, p. 265).

³ Iron seems, according to Mr Layard, to have been the most useful and most abundant of metals amongst the Assyrians (*Nineveh and its Remains*, vol. i. p. 341, and vol. ii. p. 415). Amongst other objects of iron from Nineveh in the British Museum, “may be particularly specified,” says Dr Percy, “tools employed for the most ordinary purposes, such as picks, hammers, knives, and saws.” Mr Layard (“Discoveries in the Ruins of Nineveh and Babylon,” p 198) gives the figure of a saw found by him in the northmost palace at Nimroud. It is a double-handled saw, similar in form and shape to that used by carpenters of the present day for dividing large pieces of wood. It is about three feet six inches in length. “There is,” observes Dr Percy, “no object in the Museum of greater interest than this rusted saw, and it is computed that while it could not be later in date than 880 B.C., it may have been considerably earlier” (see Dr Percy's *Metallurgy*, Part ii., *Iron and Steel*, p. 875).

⁴ Thus a ball of iron, and twelve pieces made fit for arrows, are given away at the games held at the funeral of Patroclus (*Iliad*, xxvii. 125 and 850); and Homer mentions the use of iron for axles of chariots (*Il.* v. 723), for fetters (*Odyssey*, i. 204), for axes, bills, &c. (*Il.* iv. 485, and *Od.* xxi. 3 and 81.) (See p. 89 for references to notes above.)

¹ The relative age at which copper, bronze, and iron appear among different nations, and in different parts of the world, seems to be by no means always the same. Last century, in the Polynesian Islands, the stone age at once ceased, and that of iron began at the advent of Cook and other voyagers. In a very few parts of the world, as in North America and Eastern Hungary, a kind of copper age, in which tin and bronze were unknown, seems to have followed that of stone. In the early periods of the Chaldean monarchy, or about 1500 B.C., all the implements found

to the early and general preponderance of bronze over iron weapons. In the Trojan war and the heroic age of Greece, all the military weapons mentioned seem made of bronze,¹ though Homer speaks of iron as used

amidst the primitive Chaldean ruins are either in stone or bronze. Flint and stone knives, axes, and hammers abound in all the true Chaldean mounds, but by no means so unpolished as those of the drift in France and England. In the early times of Chaldea iron is seemingly unknown, and when it first appears is wrought into ornaments for the person, as bangles and rings.—(See Rawlinson's *Five Great Monarchies*, vol. i. p. 119, &c.)

¹ Homer describes the spears, swords, and other weapons of his heroes at the Trojan war, or about 1200 B.C. as made of “*χαλκος*.” The original meaning of *χαλκος* is, no doubt, copper; but some of its alloys, and particularly that with tin forming bronze, passed under the same name, just as at the present day shillings and sovereigns in our coinage pass under the names of silver and gold, instead of being called alloys of these metals which they virtually are. We know that the armour, and particularly the offensive armour of the ancient Greeks, must have consisted of bronze and not of copper, because it possessed the physical qualities of the former and not of the latter. A bronze sword or spear can be made both very sharp in its edge and strong in its texture, whilst it is impossible to invest a similar copper instrument with the same qualities. Homer represents Ulysses as striking Demacoon on the temple with such force that his spear passed twice through the cranium, the point penetrated through the opposite temple (*Iliad*, iv. 502.) If it were possible to effect such a penetrating wound with a bronze spear, it was certainly not possible to produce this and many other extreme wounds mentioned in the *Iliad* with instruments of copper alone, as copper spears or swords would have bent or twisted under the force applied to them. The cutting power of these ancient weapons comes strongly out in the speech of Apollo to the Trojans, immediately after the fall of Demacoon, when he argues with the Trojans that “the flesh of the Greeks is neither made of stone nor of iron, so that when struck it should resist the flesh-rending bronze” (*Iliad*, iv. 511). But further, before the Trojan war bronze and its qualities were well known to the Greeks. In the old city of Mycenæ, Pausanias (*II.* 16 § 5) describes the treasury and the tomb of Atreus, the father of Agamemnon, the great leader of the Greek hosts against Troy. The structure is probably entirely sepulchral, and according to Gell, Hughes, Dodwell, and others, is as old, and probably older, than the Trojan war. On examining, within this century, the nails which had fastened the plates of metal that formerly lined the interior of this Atreian tomb or treasury, Sir William Gell found them to consist of bronze, and that the tin and copper composing them were in the usual proportions (see his *Itinerary of Greece*, p. 33, plate 7. See also Hughes, in his *Travels in Sicily, Greece, &c.*, vol. i. p. 234). As another argument for *χαλκος* or copper being used as a term to include other metallic

for other purposes.¹ Was it the greater existing amount of bronze, or of the elements of bronze—and hence its relative cheapness—in these ancient times,² or was it the greater facility of melting and working and giving it a sharp edge,—or was it a want of knowledge of any easy means of rendering the iron sufficiently hard and useful as a weapon of war,³ that led, in these early eras, to the general adoption of bronze, and the rejection of iron, as metals for cutting and military weapons? I do not know if these or any other reasons, as yet suggested, are adequate to explain the difficulty of our British ancestors, for instance, manufacturing for themselves—or purchasing from others, as the Phœnicians—implements of bronze⁴ in preference to implements of iron. Or, seeing this

alloys, let me merely add, that the word originally used for copper-smith came to be employed betimes to include a worker in metallic compounds generally, so that the smith or iron-worker, for example, passed under the general designation of *χαλκίς*, or brazier. For instance, Herodotus (I. 68) speaks of a coppersmith (*χαλκίς*) being engaged in his workshop in beating out iron. In still earlier times, Homer speaks of the manufacturer of iron axes as *ἀνὴρ χαλκίς*, literally a brazier; and a smithy, as *χαλκείον* (Odys.) ix. 391). See a learned paper on the early history of Brass by Dr Hodgson, in the "Archæologia Æliana," vol. i. p. 17 *seq.*

¹ See footnote on this point, No. 4, p. 90.

² When the accumulation of materials made by David for the building of the Temple at Jerusalem is mentioned in Chronicles, it is significantly stated that "David prepared iron in abundance for the nails for the doors of the gates, and for the joinings, and brass in abundance," so as to be both "*without weight*" (1 Chronicles xxii. 3 and 14). It seems here implied that the amount of bronze in relation to iron was comparatively unlimited. Elsewhere it is stated that Solomon, in forming the vessels of the temple, used such an amount of brass or bronze, that its weight "could not be found out" (2 Chron. iv. 18, and 1 Kings vii. 47). When we remember that one-tenth of all this bronze or brass "*without weight*" consisted of tin from the west of Europe, and particularly from Cornwall, it tends to give us some idea of the immense extent of the tin trade in these days. Other facts strengthen this idea, as at Babylon, the hundred massive gates, with their lintels and side-posts all entirely made of bronze, as mentioned by Herodotus (Lib. I. c. 179).

³ Yet Homer, in the Odyssey (ix. 392), gives an excellent account of tempering iron by plunging it when hot into cold water.

⁴ Both Strabo (iii. 5 § 11) and Cæsar (B. G. iv. c. 22) speak of bronze as one of the imports at their day into Britain, though the raw tin was for long, no doubt, their richest export from the island,—as we import cotton from America, the East Indies, &c., and send it back to the same countries as cotton cloth. The Phœnicians pro-

difficulty, ought we to go farther back into prehistoric archæology, to reach an era when bronze, in relation to iron, was, in this and other parts of Europe, almost the only metal employed in the arts either of peace or war?¹

That our Phœnician visitors and colonists raised our megalithic circles, and sculptured rings upon our rocks as Solar worshippers, is still more a question of doubt.

In imitation of the Canaanites and their Phœnician kinsmen and neighbours, the Hebrews sometimes, in their idolatry and obduracy, paid worship "to the sun, and to the moon, and to the planets, and to all the hosts of heaven" (2 Kings xxiii. 5; xvii. 16; xxi. 3-5; Deuteronomy iv. 19; xvii. 3.) "Baal and Ashtaroth, the two chief divinities of Phœnicia," to quote Mr Kenrick, "were unquestionably the sun and moon; and the minor deities appear either to have been the same heavenly bodies, or at least to have represented objects of astral worship" (p. 298). In addition to the worship offered to Baal in his original solar character, his name came to be regarded as that of supreme god and ruler. He occupied the place of both Apollo and Zeus or Jupiter in the mythologies of Greece and Rome. That Baal worship extended widely at an early period over western and northern Europe, is so far rendered highly probable by various circumstances, as, for example, by the frequent prefix of Baal to the names² of localities in the West as in the East; and,

bably brought back the tin mixed with copper, in the form of the elegant bronze weapons and ornaments that we meet with in ancient British tombs, &c., but which, as we know from the moulds left, came betimes to be manufactured in this country. The abundant copper deposits in Cornwall seem never to have been worked till the fifteenth century; and the Cornish ore is difficult to reduce to pure copper—one strong reason for it not being used in very early times (see Dr Thurnam in "*Crania Britannica*," p. 102).

¹ For ample evidence, as drawn from our cemeteries, &c., of the predominating use of bronze by our British ancestors before iron was much or at all used, see the very masterly work of Sir John Lubbock on "*Prehistoric Times*."

² "In Syria and the East, the numerous names of places," argues Mr Kenrick, p. 300, "to which Baal is prefixed in Palestinian geography, as Baal-Gad, Baal-Hamon, Baal-Thamar, Baal-thelisha, indicate the early and wider diffusion of his worship." The same argument applies to the west and north of Europe, where we have names with the same prefix of Baal, in Balerium (or Land's End), Bel Tor, in Devonshire,

specially by the persistence and popular representation of some of the older observances of Baal-worship,—such popular superstitions being always very difficult to eradicate when the results of a religious creed.¹

Bel-an, in Montgomeryshire, Baal Hills, Yorkshire, &c.; and, according to Nilsson, in more northern names, as the Baltic, the Great and Little Belt, Beltberga, Baleshangen, Balestranden, &c. According to him, Baal is a prefix as far north in Norway as the Lofoden Isles, where it occurs in the villages Balsef and Balsford. (Nilsson, p. 48.)

¹ FIRE-FESTIVALS.—Few superstitious usages of former times have continued for a longer time than the keeping of days for fire-festivals. Two great fire-festivals seem to have been formerly observed in our own country, and over a great extent of northren and western Europe, namely, 1. Beltane, upon the opening of summer on the first of May; and, 2. Samhain or Hollowmass eve, on the first of November—new or old style. A third fire-festival day has betimes sprung up at midsummer's eve or St John's eve (22d or 23d June), usually displacing, where it is observed, the Beltane festival, and accompanied by the same customs. It is to the first of these festivals namely, Beltane, from *Baal*, the Phœnician god, and *Teine*, *Tine*, or *Tene*, fire, as a possible and probable continuation in the west of the old oriental fire-worship of Baal, that I chiefly advert in the text. For the former great, and comparatively late annual prevalence of Baal-fires or Beltanes in Great Britain, in Scandinavia, on the Continent, &c., see numerous extracts in Brand's "Popular Antiquities" (May Day and Midsummer Eve); Jamieson's Scottish Dictionary, article "Beltane;" Hislop's "Two Babylons;" Nilsson's "Skandinanska Nordens Ur-Invånare" (pp. 14-76); Grimm's Mythologie, pp. 579, &c. &c. Some Celtic authors have described it as a Celtic festival, but it has long been practised in the Lofoden Islands, and in other parts too far north in Norway for a Celt to have reached. Latterly, I have seen it stated that the word "Beltane," or "Beltein," does not signify Baal's fire, but merely "a lucky" fire. Unfortunately, however, for this suggestion, the name of it in Scandinavia is Baldersbål or Balder's pyre, a word which no Celtic ingenuity could easily change into "lucky" fire. The distinguished geologist, Leopold von Buch, who saw the Baal-fires or Baldersbål lit up at Midsummer's-eve at the island of Hindön, in the far north of Norway, and within the arctic circle, shrewdly remarked that it was almost inconceivable to suppose that such a northern people should ever have themselves originated the idea of lighting fires on the hill tops in their own country at Midsummer's-eve—a time when daylight is almost so continuous with them, that the smoke rather than the flame of the fire was visible; and from this alone he argued the foreign or eastern source of the practice;—a practice, besides, which surely must have been brought from some common centre, since it could scarcely spring up spontaneously among so many distant countries and populations. In the Isle of Man—the geographic

But the idea promulgated by Professor Nilsson, that our great Megalithic circles in this and other adjoining countries were originally reared as

centre of the British islands—the month of May bears the old significant name of Boaldyn or Baal's fire; and on the eve of May-day, old style, there are still numerous fires lit up in all directions,—so numerous", says Mr Train, "as to give the island the appearance of a general conflagration" (Train's *Isle of Man*, vol. i. p. 315); whilst the individuals surrounding them blow horns and hold a kind of jubilee on the occasion. Mr Harrison, in his late edition of Waldron's "*Isle of Man*," says that it was customary to light two fires in honour of the pagan god Baal, and to drive the cattle between these fires as an antidote against murrain or any pestilential disease for the year following (p. 124). Mr O'Flaherty tells us that in the tenth century, King Cormac was in the habit of erecting two fires, between which both the people and the cattle of the district were driven for purification (see "*Transactions of the Irish Academy*," vol. xiv. p. 100, &c.); in the same way as when the Hebrews "served Baal, they caused their sons and daughters to pass through the fire" (2 Kings xvii. 16, 17). Mr Toland, an Irishman by birth, but who resided much in this country and on the Continent, writing 150 years ago, observes:—"Two rude fires, as we have mentioned, were kindled by one another on May-eve in every village of the nation (as well throughout all Gaule as in Britain, Ireland, and the adjacent lesser Islands) between which fires the men and the beasts to be sacrificed were to pass. One of the fires was on the cairn, another on the ground." (See his *History of the Druids*, 1814, p. 117.) Mrs Abbott, of Copenhagen, tells me that on both the Danish and Swedish coasts of the Baltic, the Baal-fires may be still seen, on the evening of the 23d of June, lit up in a long line at the distance of about one mile from each other. Tetlan and Temme (*Preussische Sag*, p. 277) say, that in Prussia and Lithuania, on St John's-eve, fires are seen as far as the eye can reach. Grimm remarks that, in the celebration of their fire-festivals the northern parts of Germany have adopted Easter or May-day, as Lower Saxony, Westphalia, Holland, Friesland, &c.; while the more southern parts, as the shores of the Rhine and Austria, with the kingdoms lying between them, hold the 23d of June as their fire-festival; and again some parts, like Denmark and Kärnten, keep both days (Grimm's *Deutsche-Mythologie*, p. 581). For similar fire-festivals in other parts of Europe, see Grimm, pp. 589-591, &c. In Scotland formerly various forms of frolic and merriment reigned on Beltane-day, as we know from King James the First of Scotland's celebrated poem, "*Peebles to the Play*," describing some of the usages of our forefathers on that festival in the early part of the fifteenth century; and Robert Burns has similarly described the superstitions and festivities of Hallowmass or Halloweep. Fires were formerly burned at this last festival or November eve, as well as on May-eve. "On the eve of the first day of November," says Toland, "there were also such fires kindled [as on May-day]; accompanied as

Baal or Solar temples, by the spread of Phœnician influence and colonisation among our ancient forefathers, is an opinion which seems open to the gravest objection. Stone circles of varying sizes are, as we have just seen in a footnote to a preceding page (p. 81), known in almost every portion of the world, from Greenland to Australia, and consequently in many portions where Phœnician fancies and ideas never reached. Besides, if gigantic megalithic circles, like Stonehenge, Abury, Salkeld, Callernish, &c., were erected in Britain as solar temples to the Phœnician Baal, we should naturally expect that many circles on the same gigantic scale should be found to exist, or to have existed, in Phœnicia itself, and in its numerous eastern colonies. I am not aware, however, that there can be adduced any evidence whatever to this effect; for the exceptional presence of a single small circle, as observed by Dean Stanley, near the site of Tyre, scarcely deserves consideration in such a question as this.¹ Again, that our English large megalithic circles were not

they constantly were by sacrifices and feastings." (*History of the Druids*, p. 117.) In some parts of Scotland these November fires are still lit up. Dr Arthur Mitchell informs me, that a few years ago, he counted within sight of a railway station in Perthshire ten or a dozen of these Samhain fires burning in different directions on a Halloween night.

¹ It has been sometimes argued that the erection of megalithic structures with rude and unhewn stones implied necessarily on the part of the builders a want of knowledge of metallic tools. But certain circumstances tend to refute this as an absolute idea. Thus a Semitic race—living contiguous to the Phœnicians—viz., the Hebrews, erected the first stone circles and single monoliths, of the rearing of which we have any historical record, after—if we should except the very earliest, which is even doubtful—they were possessed of bronze and iron tools. All the monoliths spoken of in Scripture, and the twelve stones reared at Gilgal after the passage of the Jordan, seem to have been erected as memorials of important facts, events, or covenants, or as sepulchral stones; but the circles of twelve stones which Moses raised at the foot of Mount Sinai, inclosing an altar of earth within its circuit, was more certainly of a religious character. For an interesting and ample discussion of the various bearings of the single pillar-stones, stone circles, cairns, &c., mentioned in the Bible, I would beg to refer to some dissertations on the subject in Dr Kitto's "*Palestine; the Bible History of the Holy Land*," pp. 241, 356, 404, and 428. Dr Kitto does not allude to the remarkable fact that it is several times specially commanded that, although iron and other instruments were well known and used at the time, the stones used to build altars should

Phœnician solar temples, is strongly borne out by the fact, that none of the solar temples of Phœnicia and the East consisted—as our megalithic circles do—simply of a circular series of open and more or less distant upright stones. On the contrary, they were built, as we have every reason to believe, from the remaining temple walls in Gozo, Malta, &c., solidly of stones; and though possibly, like some large eastern public buildings left occasionally roofless above, this appears not to have been usually the case with Phœnician temples.¹ The coins of Berytus, Byblus, Tripoli, &c., seem always to represent Astarte as standing under a roofed temple. Doubting, then, that the megalithic circles of Great Britain were raised as solar Phœnician temples, we doubt also entirely that the concentric circles and cups carved upon our rocks and stones were cut out upon them by sun-worshippers, and that they were sculptured by them as symbols be whole, and not hewn or touched by any tool. (See Exodus xx. 25, and Deuteronomy xxvii. 5.) “An altar of whole stones over which no man hath lift up any iron” was in consequence erected on Mount Ebal by Joshua about 1450 B.C. Some twelve or thirteen centuries later, the altar erected in the Temple—after the profanation of it by Antiochus Epiphanes—was, according to the first Book of the Macabees (iv. 47), built of “whole [or unhewn] stones, according to the law.”

¹ Josephus quotes the Greek author Menander, the Ephesian, to the effect that some ten centuries B.C., Hiram, king of Tyre, raised in the city “a bank on that called the ‘Broad Place,’ and dedicated that golden pillar which is in Jupiter’s [Baal’s] temple; he also went and cut down timber from the mountain called Libanus, and got timber of cedar for the roofs of the temples,”—one of which he rebuilt and consecrated to Hercules, and another to Ashtaroth (see Whitson’s translation of Josephus’ Works, Essay against Apion, Book I. § 18). Menander’s circumstantial account of the position of the bank on the “Broad Place” or “Broadway” of the city—no doubt a well known street or square in ancient Tyre (as it is in its mighty representative—the modern American Tyre)—was possibly copied from the public records. Josephus elsewhere states (§ 17), that the Tyrians kept “with great exactness” their public records, both domestic and foreign; and it is certainly much to be deplored that these chronicles, with the history of the Phœnicians by Dios, and all the other native literature of Phœnicia, have, with one questionable exception, utterly perished; a loss which is the more to be lamented, for none of the nations of antiquity diffused more widely over the ancient world a knowledge of industry and of the blessings of peace and commerce. What another flood of light might we have on ancient history if, by any strange chance, a copy of Pytheas’s account of his travels in Britain (350 B.C.) should ever turn up in the yet unexplored parts of Pompeii or elsewhere. Pytheas “travelled all over Britain on foot” (Strabo ii. 4 § 2).

of their Sun-god. The idea that these circles and cups are in any way connected with Baal or Solar worship seems to me entirely hypothetical, and without any direct proof or evidence whatever in its favour. In answer to Professor Nilsson's lengthy and ingenious archæological speculations upon this point, it may be enough, on the present occasion, to reply, in regard to British stone concentric ring-carvings and cups—

1. That the carvings of concentric circles and cups are not by any means confined to the bronze era, for they are found from the earliest to the latest ages in architecture and lapidary carving; while, on the other hand, the bronze era itself, besides displaying so frequently circular and spiral forms, contains many bronze articles, cut and ornamented with angulated double and single zig-zags, chevrons, and rhomboid lines (see Nilsson's *Skandinaviska-Ur-Invånare*, p. 2); and stones, also, as in the Kivik monument—supposing it, as Nilsson thinks, to be of the bronze age—carved with weapons, animals, chariots, and men differently dressed and armed. Nor must we forget that during the bronze age in the East, metallic figure sculptures were common, as on temple offerings, and on the helmets, shields, and chariots of some of the Greek heroes.

2. That we have no evidence whatsoever, from any Phœnician or any other ancient remains, that a series of cups or of successive concentric circles or rings—divided or not by a traversing radial duct or groove—was ever anywhere connected with Solar worship, or with the religion of Baal.

3. That it is altogether gratuitous to imagine that our cups and series of concentric lapidary rings were cut to symbolise the sun, to which they have no similarity except the one equivocal attribute of roundness.

4. That over the shores of our own country, as well as in the interior of it, these lapidary cuttings have already been discovered extending far too widely and generally for being the possible product and effects of Phœnician influence and civilisation among us, unless—contrary to all existing ideas—the Phœnician people had found an extensive general domicile in this island. On the other hand, it must further be remembered, that the same specific lapidary carvings remain as yet undiscovered in the true colonies and country of Phœnicia.¹

¹ I have seen drawings by Mr Adams, Miss Smith, Mr Bartlett, and others, of a few stones marked in the Giant's Temple (*Torre dei Giganti*) at Gozo, and the ruins of

5. These lapidary concentric rings and carvings are found profusely cut upon chambered tumuli in Brittany, where—as we shall see in a subsequent chapter—the contained relics of the barrows do not include bronze instruments, nor have any apparent connection with Professor Nilsson's Bronze and Phœnician era,—but are all, on the contrary, of the anterior materials belonging to the so-called “Stone age.” And,

6. Though carefully looked for by Sir Gardner Wilkinson in Devonshire, and by him and by Mr Blight in Cornwall, lapidary cups or circle cuttings have not yet been found, with one single exception (p. 52), in any part of these two counties. Yet if these cups and circles had been Phœnician in their origin, they ought certainly to have been discovered more abundantly in these two counties than in any others, seeing they formed the district in which alone the tin trade existed. In reference to this last remark, let me here add, that the abundance of the lapidary cup and circle cuttings in some counties, as in Northumberland, Argyle-

Hagar Keem, near Crendi in Malta, but with one exception—that of a stone with two or three concentric circles at Hagar Keem—all the few others seemed short ornamental raised volutes, such as Rawlinson represents as forming a double bracket for a statue of Astarte in Etruria (see his edition of Herodotus, vol. ii. p. 543). Besides, we have no adequate evidence that the old cyclopic buildings in Gozo and Malta were built by the Phœnicians at all. A few of the stones are minutely dotted or picked over the surface, as in the case of some of the lozenged ornaments at New Grange, Ireland. I have seen it suggested, that possibly our British lapidary circles may be found similar to those cut on the pilasters and other stones discovered at the entrance of the so-called Treasury of Atreus at Mycenæ. But the drawings of Mr Dodwell (see his *Tour through Greece*, vol. ii. p. 232) and of Mr Donaldson (see Stewart and Revett's *Antiquities of Athens*, Supplement, p. 32) show the carvings on these Mycenæan stones not to be single nor concentric circles, but to consist of long and elegant continuous strings of double spirals, encircling the columns, and introduced between chevrons and soffits. Besides entirely varying from the ancient British sculptures in this respect, and in the advanced spirit of design which they display, they are further different, in being not incised, but, according to Mr Donaldson, “cut in very low relief.” Mr Dodwell states the curious fact, that upon the fragments of pottery scattered on all sides near this so-called tomb of Atreus, spiral and zig-zag ornaments are seen similar to those sculptured on the marbles and pillar at the entrance (p. 237). Dodwell, Clarke, Mure, and others, believe the architectural spiral zig-zag ornaments at Mycenæ not to be Greek in their origin, but rather Asiatic or Egyptian. No one, as far as I am aware, has suggested their Phœnician origin.

shire, Orkney, &c., and their nearly entire absence from others, as Cornwall, Devon, and Pembroke,¹ is a subject by no means undeserving of attention, and one which may yet contribute to the solution of the difficulties connected with their origin and object.²

Are not the Kivik Sculptured Stones Cimbrian?

Before leaving altogether Professor Nilsson's ideas and opinions on these and other questions connected with the present inquiry, I will take this opportunity of adding, that—though I have hitherto cited without criticism—his observations on the Kivik monument, I have the gravest doubts of—even as to that monument—being Phœnician in its origin. On the contrary, I incline to think that the historical figures answer better to the accounts which we have of the customs of the neighbouring ancient Cimbri than to any account which we have of the Phœnicians. In other words, in all probability, they are native rather than foreign. During a century or two before the Christian era, large masses of Cimbri traversed and devastated various parts of Europe, and invaded Gaul and Italy. They at different times defeated no less than five Roman consular armies (Tacitus, *Germania*, cap. xxxvii.) A nation of these Cimbri seems to have been fixed from the time of Pytheas³ at least (350 B.C.), down to the time of the Roman Emperors,⁴ in the

¹ The Rev. Mr Barnwell and Mr Blight have examined most of the megalithic structures in Pembrokeshire without finding any example of the circle or cup cutting, and yet the eyes of both were well instructed for the purpose. I should have already stated (p. 20) that it was Mr Barnwell who discovered the circle-cutting in the Goggleby stone after several antiquaries had passed without noticing it, and I confess to have been one of the number.

² In the special localities in which the ring and cup sculptures are, there is this analogous difficulty: Why are they found, as at Caerlowrie, upon the lid of one kistvaen only out of several placed in the same ground? Or, as at Ford, on the lids of two out of several mortuary urns or pits? Do they note any specialty of creed, office (as priests), or rank on the part of those, over whose remains they are placed? Why are some megalithic circles marked, and not others? Why only some of the obelisks at Largie, Ballymenach, &c., and not on all of them?

³ Mommsen's *History of Rome*, vol. iii. p. 178.

⁴ See Tacitus's *Germania*, § 37; and *Mela*, iii. 123 3.

modern kingdom of Jutland or Denmark—the ancient Cimbrian Chersonese, the *Promontorium Cimbrorum* of Pliny : and Tacitus describes them, as in his time, small in number, but still great in renown. This, the “original country,” of the Cimbri, as some have termed it,¹ stands at a short distance across the Cattegat, from Scania, where the site of the Kivik monument is placed. The sculptures on the monument, especially on the stones 7 and 8, perhaps portray more faithfully a victory festival of the Cimbrians than of the Phœnicians. “The Cimbrian,” writes Mr Mommsen, “fought bravely—death on the bed of honour was deemed by him the only death worthy of a freeman, but after the victory he indemnified himself by the most savage brutality. . . . The effects of the enemy were broken in pieces, the horses were killed, the prisoners were hanged, or preserved only to be sacrificed to the gods. It was the priestesses—grey-headed women in white linen dresses and unshod—who offered these sacrifices.”² These priestesses thus dressed, and, adds Strabo (Book vii. chap. 11, § 4), bearing drawn swords, went to meet the captives throughout the camp, and having crowned them, led them “to a brazen vessel containing about twenty *amphoræ*, and placed on a raised platform, which one of the priestesses having ascended, and holding the prisoner above the vessel, cut his throat. . . . In battle, too, they beat skins stretched on the wicker sides of chariots, which produces a stunning noise.”³

¹ See *Cimbri*, in Smith's Dictionary of Geography, vol. i. p. 623.

² History of Rome, translated by Professor Dickson, vol. iii. p. 180. On the practice of immolating prisoners of war by the natives of Anglesea, see Tacitus's *Annales*, lib. xiv. cap. 30.

³ Strabo, Book VIII. chap. ii. § 3. In 1845, Lisch found inclosed in a mound at Peccatel, in Mecklenburg, a round cauldron three feet in diameter and two in depth, placed between what he conceives to be a large altar on which the victim was placed, and a station which he supposes to have been the position of the sacrificing priest or priestess in such Cimbric rites. The edge of the cauldron projected about a foot above the level of the altar. The skeleton of an unburnt human body lay in a trough or coffin six feet long, three feet broad, and one in depth, in the neighbourhood of the cauldron. Both this coffin and the so-called altars and sacrificing station were made of sand, mixed clay, and hardened up with clay. (See “Jahrbucher des Vereins für Mecklenburgische Geschichte und Alterthumskunde,” ix. p. 369).

The strange figures around the caldron or altar, in the second row of stone 8, and last row of stone 7, probably portray the dress of women rather than of men; and their great numbers is more in accordance with the fact stated by Strabo, that the Cimbri were accompanied in their military expeditions by their wives, than with the idea that the Phœnicians would carry such an array of priests as we have on these stones, to such a very distant shore as the coast of Scania. Under this view, we would beg further to suggest, that the conical body represented centrally in figure 1, is not a symbol of Baal, but possibly a representation of the elongated spear or *materis*, which the Cimbri carried (Mommsen, iii. 179). In the drawings of the Kivik stones,¹ given by Hilfeling, Sjöborg, and Holmberg, this central cone is very much more elongated and spear-like than it is in the sketch published by Nilsson. Holmberg considers it to be a bronze celt seen in profile; the narrow bodies on either side to be bronze arrow points; and the lateral hatchets, with knobbed handles, to be true representatives of the bronze form of that weapon.

CHAPTER XI.—THEIR PROBABLE ORNAMENTAL CHARACTER.

Without attempting to solve the mystery connected with these archaic lapidary cup and ring cuttings, I would venture to remark that there is one use for which some of these olden stone carvings were in all probability devoted—namely, ornamentation. From the very earliest historic periods in the architecture of Egypt, Assyria, Greece, &c., down to our own day, circles, single or double, and spirals, have formed, under various modifications, perhaps the most common fundamental types of lapidary decoration. In prehistoric times the same taste for circular sculpturings, however rough and rude, seems to have swayed the mind of archaic man. This observation as to the probable ornamental origin of our cup and ring carvings holds, in my opinion, far more strongly in respect to some antique stone-cuttings in Ireland and in Brittany than to the ruder and simpler forms that I have described as existing in Scotland and England. For instance, the cut single and double volutes, the complete and half concentric circles, the zig-zag and other patterns, which

¹ See Holmberg's *Hällristningar*, p. 15, and Tab. xliv. fig. 162, &c.

cover almost entirely and completely some stones in those magnificent though rude Western Pyramids that constitute the grand old mausolea of Ireland and Brittany, appear to be, in great part at least, of an ornamental character, whatever else their import may be. The great curb-stone, for example, at the entrance of New Grange, covered with double volutes (see Plate XXIX. fig. 1), and many of the lapidary cuttings in the interior of that gigantic barrow, the granite blocks forming the props of the passage into the sepulchral chamber at Gavr Inis (see Plate XXX. fig. 1), and some other Brittany stones, seem to present patterns of ornamental lapidary carving.

In some of these, and in other instances, the stones are densely covered with various and endless rock-cuttings, with curved, spiral, and angled lines, like the face of a tattooed¹ Polynesian, and possibly somewhat like the faces of our British forefathers in those distant days when they stained their skins with woad. The surfaces of the stones in the Irish and the Brittany instances I have referred to in the preceding paragraph, and the surfaces of the tattooed Polynesian faces, are indeed so much alike in general character, as to suggest a possible general origin—in the one instance as well as in the other—in that craving which naturally exists, even among the rudest people, for decoration and embellishment; and, after all, an elaborately tattooed stone is not, perhaps, to our ideas at least, so strange as an elaborately tattooed skin. In far later and mediæval times we see the old sculptured stones and crosses of Scotland and Ireland decorated in a more perfect but yet analogous way—and for an analogous object too—by endless and elegant scrolls, circles, volutes, chevrons, and other interlaced and ever-varying patterns cut upon their faces and sides.

CHAPTER XII.—THEIR POSSIBLY RELIGIOUS CHARACTER.

The Scottish concentric ring-cuttings and cup-cuttings, however, are far ruder and simpler than the Irish and Brittany examples of old lapi-

¹ M. Dumont d'Urville, in his "*Voyage de l'Astrolabe*," gives numerous figures of tattooing amongst the Polynesians. The principal figures upon the face consist of simple or compound spirals (see the accompanying plates, tom. i. pl. 63, 74, &c.) They indulge also in abundance of circular and crescentic lines and figures.

dary ornamentation to which I have referred. They lack that elaborateness and diversity of detail which characterise the cuttings within the Irish and Brittany sepulchral chambers. They are also in most cases far more sparse in their distribution, and more rough and rude in their details, than we would naturally perhaps expect in rock or stone surfaces carved for mere and pure decoration only. At the same time these ancient rock-cuttings in Scotland and England present indisputably, wherever they occur, the same archaic "handwriting on the wall,"—they are everywhere so wonderfully similar in their type of art,—so nearly and entirely like to each other in all localities in their general artistic conception and details, as to prove that they originated in some fixed community of objects or ideas among those that cut and formed them—whether their origin was ornamental, or symbolic, or both. But, whatever else was their object, that they were emblems or symbols connected in some way with the religious thoughts and doctrines of those that carved them, appears to me to be rendered probable, at least, by the position and circumstances in which we occasionally find them placed. For in several instances we have seen that they are engraved on the outer or inner surface of the stone lids of the ancient kistvaen and mortuary urn. The remains of the dead which occupied these cists and urns were covered over with stones carved with these rude concentric circles, apparently just as afterwards—in early Christian times—they were covered with cut emblems of the cross placed in the same position. Man has ever conjoined together things sacred and things sepulchral,—for the innate dread of death and the grave has ever led him, in ancient as in modern times, to invest his burial rites and customs with the characters and emblems of his religious creed.

In some instances the carved stone employed to cover the body or ashes of the dead, or used in the construction of their megalithic cists, seems to have been taken for that purpose from other localities where possibly it had been already regarded as sacred, and had possibly served for other religious purposes. Thus, for example, the carved cist-cover at Craigiehill is, at one end, broken off right through two or three series of concentric rings (see Plate XI. fig. 2), which must have been cut upon it before it was reduced to its present shape and size; the small slab from the cist at Carnban has been similarly mutilated through the

linear course of the carving upon it, to allow of it being placed as a panel in the end of the grave; and a few of the sculptured stones in the megalithic sepulchral crypts and galleries of Ireland and Brittany have been ascertained to be carved upon their hidden as well as upon their exposed sides, showing that they were sculptured, in part at least, ere they were placed in their present situations.

Perhaps it might be further argued that the presence of the concentric rings and cups on the sides of Long Meg, the Calder stones, and the stones of other "Druidic Circles," goes to show their sacred or religious character,—whether we regard megalithic circles as places of worship, or places of sepulture, or both. The same remark applies to their appearance upon cromlechs; and, if possible, more emphatically still to their occurrence upon sepulchral monoliths and standing stones.

CHAPTER XIII.—THEIR AGE, OR THE DATE OR DATES AT WHICH THE RINGS AND CUPS WERE CUT.

The central cup, with or without a surrounding circle or circles, constitutes one of the most simple, and consequently most frequent, forms of ancient sculptured ornamentation. Nothing could possibly be more rude and primitive, except it were one or more unornamental straight lines or grooves such as we occasionally see both traversing and passing beyond the cups and rings. The very simplicity of the cup and circle forms is one strong reason for our regarding these types of sculpture as the most archaic stone carvings that have been left to us. When once begun, such types of lapidary carving and ornamentation would—for the same reason—be in all likelihood readily transmitted down to future generations—and perhaps to races even—that followed long after those who first engraved them on our stones and rocks. Possibly their sacred symbolisation—if they were sacred—contributed to the same end; for forms and customs that were originally religious observances often persist through very long ages after their primary religious character is utterly forgotten, and even where the type of religion has been totally changed.¹

¹ As, for example, the use of the old pagan marriage-ring in the Christian marriage rites of some churches; the general avoidance of marriage in May, a supersti-

As yet, we want a sufficient body and collection of data to determine with any accuracy the exact age or ages and periods at which the lapidary cup and ring cuttings we have described were sculptured. But the facts we possess are quite sufficient, I think, to prove that the date or dates at which they were for the most part formed must be very remote. In evidence of this I shall appeal in the following chapters—though at the risk of some recapitulation—to their precedence of letters, and traditions; to various data regarding the connection of these rude sculptures with the dwellings and sepultures of archaic man; to the archaic character of the antiquarian relics with which they have been found in combination; and to their geographical distribution as bearing upon their antiquity.

CHAPTER XIV.—THEIR PRECEDENCE OF LETTERS AND TRADITIONS.

In no instance have the lapidary cup and ring cuttings been found in Scotland or England conjoined in any way with any attempts at any form, however rude and primitive, of letter-cutting or letter-writing. We have no reason whatever to believe that the ring and cup cuttings are themselves, as we have heard suggested, unknown words, or hieroglyphics, for they are too few in number and too analogous in form for such a purpose;¹ and if any type of letters had been known to the carvers of the cups and rings, examples of these letters would almost inevitably have been found somewhere cut alongside of these sculptures.² We are

tion described some eighteen centuries ago by Ovid; the ancient heathen well-worship, which is not yet extinct in some parts of the British islands; the lighting up of Baal-fires on May and Midsummer's eve, &c., &c.

¹ All the cups, for example, upon the cromlechs and tumuli, figured in Plates VIII., IX., and X. are so similar—as are all the concentric circles upon Long Meg, in Plate VII.—that they offer singly no such differences as render them capable of being interpreted as individual and separate letters.

² Governor Pownall, in the "*Archæologia*" (vol. ii. p. 260), imagines the broken gridiron-looking markings at New Grange (Pl. XXVII. fig. 5) to be some old Eastern or Phœnician inscription; and Mr Du Noyer, in the *Meath Herald* for October 21, 1865, reports among the sculptured tombs of Sleive-na-Caillighe what he believes to be short Ogham inscriptions or letters. But my observations in the text apply to British antiquities, and not to those of Ireland.

not aware when a knowledge of letters reached the western shores of the Old World, and whether they came in, as some hold, with a race using bronze weapons and ornaments,¹—or with a later race, using iron implements, as others maintain. At all events, they were not apparently known or employed in Western Europe for centuries after the inhabitants of Western Asia had engraved their deeds and thoughts upon rocks and stones, bricks and tablets of clay. And in regard to Britain, we are at all events fully entitled, I believe, to hold that the race or races that cut our many rude ring and cup sculptures were not, either at the beginning of the practice, or even up to the termination of it, acquainted with the use and carving of letters—or otherwise, as I have just stated, we would almost inevitably have found traces of their letters in connection with some of these lapidary sculptures.

Nor am I aware that in any spot in which the ring and cup sculptures have been found, has tradition preserved the faintest remembrance, either of their object or their presence. They are too decidedly “things of the past,” for even the most traditional of human races to have retained the slightest recollection of them.² Thus, for example, in the kistvaen

¹ Certainly not with the bronze era, for traces of writing on old bronze weapons have not been found except in a very few instances. Two of these instances consist of bronze helmets, with Greek inscriptions cut upon them. One of them—the helmet of Hiero I.—is probably of the date of 474 B.C.; the second may possibly be a century earlier. (See these helmets and the inscriptions upon them figured in Mr Franks’ valuable additions to the “*Horæ Ferales*,” pl. xii.) Both of these helmets are now in the British Museum. At Constantinople there is still preserved the brazen stand of the famous golden tripod, which was dedicated by the confederate Greeks to Apollo at Delphi, after the defeat of the Persian host at Plataea, B.C. 479. On its stalk is engraved, in ancient Greek letters, a battle-roll of the Greek army, which was possibly used by Herodotus himself in drawing up his history. (See Rawlinson’s *Herodotus*, vol. iv. p. 451).

² The carving of circular markings upon a kind of stone that is remarkable for the tempting facility with which it may be incised, is a practice followed in one spot of the British Isles at the present day. The rock at Fetheland Head, Shetland, is formed of steatite or soap-stone. It is as easily cut or whittled with a common knife as a piece of wood. Three years ago, my friend Dr Arthur Mitchell saw the herring fishermen, in a day of idleness, cutting circles with their knives in the face of the rock, without the operators being able to assign any reason for their work, except that others had done it before them. The circles were all single, round, and small,

of the large barrow which formerly stood at Carnban, in Argyleshire, some two miles west of Lochgilphead, we have seen (p. 31) a sculptured slab introduced as a loose panel, within the stone grave of the great chief or priest in whose honour the barrow was raised. Of all races, the Celtic is specially retentive of traditional descriptive appellations. But he who was buried in the cairn gives no more his own name to it—as, no doubt, he did at first for long ages; and instead of recognising the barrow by his special appellative, the neighbouring Highlanders have, from time immemorial, known it merely from the colour or figure of its stones, under the meaningless name of “Carnban,” or “the white or fair cairn.” Did the occupant of this originally great cairn, with his flint fragments buried beside him, belong to an earlier branch of the Celtic race than the present? Or did he and his brotherhood, who sculptured the rocks in the same valley with rings and cups, not pertain to a population or a race really older than the Celtic?

CHAPTER XV.—THEIR CONNECTION WITH ARCHAIC TOWNS AND DWELLINGS.

When cut upon rocks *in situ*, the cups and rings have usually been found, in Northumberland, within the walls of archaic camps or towns, or placed at a small distance from them. At Old Bewick, some of the sculptured stones stand both within and without the great and striking ramparts of that ancient British city; and at Rowtin Lynn and Chatton Law there are walled camps or citadels in the immediate neighbourhood of the sculptured rocks; and the sculptured rocks themselves are included within their secondary defences or out-towns (see *ante*, p. 50). We have found the same observation to hold good in reference to examples of other isolated cut stones in Northumberland, Cornwall, Isle of Man, &c.

But in highly cultivated districts the march of agricultural improvement without any central cup or side duct. On the same rock were initials and crosses carved out. Dr Mitchell found also circular marks on the rock, varying in diameter from ten to thirty inches—of an older date, and some of them turf-covered—which had been made, not by a knife, but by a pick or pointed chisel. The larger circles are averred by the natives to be of Danish origin.

ment has generally swept away all traces of ancient human habitations in the neighbourhood of the sculptured cists and monoliths; though not always. We have, for example, found (p. 45), within a few miles of Edinburgh, the carved kistvaen at Craigie Hill placed outside the ramparts of an ancient walled town; and the monolith at Comiston occupying a similar position (p. 46).

There exist no precise facts to fix the age at which the ancient British towns at Old Bewick, Rowtin Lynn, Craigie Hill, Comiston, &c., were inhabited; but probable data bearing on the point may yet be recovered in the form of buried tools, pottery, and weapons—as, for example, even in the varying and particular forms of their flint arrow-heads—in the special types of their walls and defences—in the characters and shapes of their included hut and house foundations and pits, &c. Wanting, however, still any adequate facts to determine the exact age of these towns or forts, we cannot through them approach with any accuracy the era of the archaic sculptures connected with them. Nor must we forget, in attempting to reason from the age of these ramparted dwelling-places, that in all likelihood—in ancient as in modern times—the same spots served for cities and communities through many long generations; and that the sculptures may belong to their earliest and not to their latest period of existence.

Within these archaic towns and camps no lapidary circles and cups have yet, I believe, been found in immediate connection with the stones of their hut foundations, circles, and pits—the dwelling-places of their olden inhabitants. They have been discovered, however, upon the stones of single human dwellings probably equally old. Among the most antique types of artificial human habitations in this country are our underground houses or “weems.” I have already adduced instances of one or two of these underground weems having, in their structure, stones sculptured with rude cups and rings, &c. The origin and general age of this type of artificial human dwelling we know not, though the rude materials and relics occasionally found within them prove the earlier forms of them to be very ancient. But some facts show that the ring and cup cuttings were as old or older than the date of the building of the most ancient type of these weems; for in one or two archaic earth-dwellings of this kind, blocks of stone, carved with ring and

cup cuttings (see Plates XX. and XXV. fig. 3), have been discovered both in the foundations and roof of the weems, where they had apparently been introduced and used, after serving other functions as sculptured stones; and possibly at so advanced a date from the time of their carving, that all reverence for the sculptures themselves had died out in the minds of the generation who used them as simple building material.¹

These underground weems are seemingly artificial representations of those natural caves which formed in all likelihood, at a still earlier period, the dwellings of our archaic forefathers. On the coast of Fife there are several of these natural caves or "weems," as they are still called in that district. One, which was lately opened near Easter Wemyss, contained numerous relics of bones, broken and split for the extraction of the marrow, as in the bones of the ancient Danish midden-heaps. In another cave, nearer the village of Easter Wemyss, which I visited with Dr Dewar, I found faded appearances of some depressions or cups with small single circles cut on the wall. Probably a more minute and extensive search in these caves would discover many more such carvings;² and it is not impossible that they or similar rude sculpturings

¹ The edges, however, of the rings and cups upon the large stone from the weem at Letham Grange, described at p. 41, are still so sharp as to show that the block had not been greatly exposed and weathered before it was buried in the foundation of this underground house. Could the builder of this weem have cut these markings upon the stone, with the hope of thus investing it with any sacred and protective character, before he placed it in the foundation of his dwelling?

² I leave this sentence as it was written, above two years ago. Shortly after that period I revisited Wemyss to inspect the other caves of the district, and make more minute observations than I could do in my first hurried visit, and discovered on the walls of some of them many carvings of animals, spectacle ornaments, and other symbols, exactly resembling in type and character the similar figures represented on the ancient so-called Sculptured Stones of Scotland, and like them, probably about a thousand years old. The small circles and cups which I saw in the Court Cave on my first visit, proved, on more careful inspection, to be the faded fragments of ends of two or more so-called "sceptres" or sceptre ornaments. On the occasion of my revisiting the caves, I was accompanied by Drs Joseph Robertson, Duns, and Paterson; but my esteemed friend Mr John Stuart, who has so admirably collated our Sculptured Stones, declined to make one of the party, as he deemed it im-

may yet be detected on the walls of those caves which, from their containing fragments of the bones of men and animals, with weapons, and other rude works of human art, are known to have been, in very distant and remote times, the dwellings of man; such as Kent's Holé, Wokey Hole, Brixham Cave, and the old inhabited caves of Belgium, France, &c.

CHAPTER XVI.—THEIR PRESENCE ON THE STONES OF THE MOST ANCIENT FORMS OF SEPULTURE.

Our archaic forefathers have left us many more specimens of the tombs of the dead than of the dwellings of the living; and ancient sepulchres have ever formed great treasuries for archæological investigation. These sepulchres are, as we have already seen, especially rich in the rude sculpturings after which we are inquiring. They have been found (see Chapter iv.) on the stones covering urns; on those forming the lids of kist-vaens, specially of the short and earlier form; within sepulchral chambers; and on the stones of cromlechs; not to speak of their appearance upon sepulchral stone pillars and megalithic circles. Some of these forms of sepulture, as the megalithic circle, the chambered tumulus, and its fundamental prototype, the uncovered cromlech, are in their origin beyond—perhaps very far beyond—our historic era. The carvings upon these sepulchral stones are probably all as old, and some of them even older, than the megalithic tombs of which these stones form a part. We have evidence of this in the facts I have already adverted to in pp. 81 and 105,—as that, for example, in one or two of the sculptured stones within the great sepulchral chamber at New Grange, some sculptures can be felt carved upon the backs of the blocks,—a position in which they could only have been cut before the sepulchre itself was reared. It is apparent that on other stones the sculpturings were made after the blocks were placed, as the patterns

probable that we would find anything interesting. I described at length these Fife Cave carvings to the Royal Society of Edinburgh on the 2d January 1865, and illustrated them by a full series of drawings of the sculptures made by Mr Drummond, R.S.A., and Dr Paterson. My communication on the subject (see Appendix) was published in the "*Proceedings of the Royal Society of Edinburgh*," vol. v. p. 521 to 526.

are continued from the face of one stone to another.¹ Not knowing with any reliable exactitude the era of these great sepulchral works, on the stones of which the cups, rings, &c. are cut, we fail of course in fixing the data of the sculpturings themselves. But that some of these sepultures and their attendant sculpturings are very ancient, we know from another piece of evidence which we shall consider for a moment, viz.,—the nature of the relics which have been found in connection with them.

CHAPTER XVII.—THE ARCHAIC CHARACTER OF THE CONTEMPORANEOUS RELICS FOUND IN COMBINATION WITH THEM.

Antiquarian relics found in connection with ancient human habitations, whether the dwellings of single families or of large communities, are liable, as archæological chronometers, to mislead us by the evident fallacy that these dwellings may have, in ancient times, been often the residences, not of one generation, but of many successive generations, and even of successive races of men.

A similar source of fallacy is often involved in the answers which the archæologist may obtain from the examination of ancient places of sepulture, unless he pursues his interrogations with all due caution; for chambered tumuli, burial mounds, and cemeteries when once rendered sacred structures and spots, by the interment of the dead, continued occasionally to be used as places of sepulchre, for long ages by later and distant populations. Hence the well-known fact, that as late as 785, Charlemagne had to issue a special order to his christianised Saxon subjects, that they should cease from interring their dead in the tumuli of

¹ When speaking of the lines cut upon the cromlech called the Merchant's Table, at Locmariaker in Brittany. Mr Lukis observes, that "the stones were engraved *previously* to the construction of the cromlech, for the scored lines pass over the tops of the props at the points in contact with the capstones. This ornament was, however," Mr Lukis adds, "completed [occasionally] after the erection of the whole structure, for in the instance of Gavr Inis, the small stones—wedged into the spaces between the principal—have the scored work continued over their surfaces."—*Archæologia* for 1853, vol. xxxv. p. 250.

the pagans, instead of burying them in the churchyard.¹ (*Ut corpora Christianorum Saxonum ad cœmeteria Ecclesiæ deferantur, et non ad tumulos Paganorum.*) Many of our oldest barrows and burial mounds contain, in this way, *secondary* or later interments, which have often been confounded in archæological researches with the *primary* burial, for which the barrow or mound was raised. The long barrows of England, for example, seem to have been originally the graves of a population who had elongated skulls,² and apparently possessed no metallic weapons; but in other parts of the long barrows, and before reaching

¹ Pertz's *Monumenta Germaniæ Historica*; *Legum*, tom. i. p. 49. In the same capitulary Charlemagne issued orders against the practice of burning the dead, and laid it down as a capital crime. (" *Si quis corpus defuncti hominis secundum ritum paganorum flamma consumi fecerit, et ossa ad cinerem redierit capite punietur.*")

² The doctrine of the greater antiquity in Britain, of the long-headed or dolicocephalic, as compared with the round-headed or brachycephalic race, was first broached some twenty years ago, by one of our greatest leaders in Scottish archæology, Professor Daniel Wilson. (See his *Prehistoric Annals of Scotland*, 1851, p. 160, &c.) A late writer on the subject, and a most keen and accurate observer, Dr Thurnam, in an essay "On the Two Principal Forms of Ancient British and Gaulish Skulls,"—in speaking of his own extensive experience in England, remarks, in regard to the long-chambered barrows of North Wilts and Gloucestershire,—“There is no well authenticated proof that metallic objects, whether of bronze or iron, have in any case been found in the undisturbed chambers of these tombs, which, however, yield well-chipped flakes and arrow heads, and also axes of flint. The skulls from these barrows, which are those of a people of middle, or even short stature, seem certainly the remains of a more ancient people than those who raised most of the circular tumuli of this part of the island.” Dr Thurnam, in the essay referred to, p. 39, and previously in the “*Crania Britannica*,” enumerates as the results of his observations and study of British barrows, in regard to their shape, and the skull forms of those buried in them, the brief axiom,—“Long barrows, long skulls; round barrows, round or short skulls.” The connection of the long skull with the long barrow and the Stone period seems founded on well established facts by Dr Thurnam with regard to some parts of Great Britain; but it is doubtful if his axiom holds true of all parts of England, or of other countries, and still more distant human races. The skulls from the Neanderthal and Engis caves, when man was contemporaneous with the cave bear, are elongated in form; one from the cave of Lombrive in the “rein-deer period,” is said, on the contrary, to be round. But the whole subject of skull forms, as connected with ages and races of men, is still at best involved in no small doubt and difficulty.

the spot in which their *primary* occupants have been placed, other graves are frequently enough met with in the same mound; and their *secondary* occupants are occasionally found to have been buried with weapons of bronze, and even of iron.

In this respect single graves or kist-vaens are freer from doubt than grave mounds, and barrows, and cairns. The sculptured slab in the Coilsfield cist covered an urn presenting, to use the language of Professor Wilson,¹ "the usual characteristics of primitive sepulchral pottery." (See figure of a portion of this sepulchral urn in Plate XIII. fig. 2.) In Plate XI. fig. 5 is sketched an urn with even ruder markings, found near Scarborough in a tumulus, some of the stones of which were cut with cups and rings. Yet archaic man ornamented his sepulchral and other pottery far oftener than he cut figures on stones; and his bone carvings were often more elaborate than his lapidary. The mode of burial, with the body more or less contracted and bent within a short cist or grave, is usually regarded as a form of interment older and more archaic than that with the body buried at full length and in long kist-vaens. Most, if not all, of the single cists hitherto found covered with sculptured slabs,

¹ Unfortunately this fragment of urn has not been preserved, and the original sketch of it, from which Dr Wilson made his woodcut, is also lost. On asking Mr Birch of the British Museum, the author of the well-known and classical work on the "History of Ancient Pottery," the probable age of this urn, as far as could be judged from the sketch of it given by Dr Wilson, and copied, as stated above, into Plate XIII., that eminent archæologist replied, "It is always desirable, if possible, to see the object itself before pronouncing an opinion, but the urn seems to me closely like those found in Wales and Ireland of the so-called stone period. Its closely-hatched lines have great similarity with the vases of North Wales and Ireland, and it was no doubt of a light brown, imperfectly baked clay, such as is commonly found in the early Celtic graves, and some examples of which are engraved at the end of my work on pottery (vol. ii. *ad finem*). It must therefore be assigned to a remote epoch as to style." My friend, the Rev. Mr Greenwell of Durham, another high authority on such questions, has kindly outlined, as seen in Plate XIII., the probable shape of this Coilsfield urn, and adds, that such urns are found not unfrequently in Ireland, are often associated with bronze daggers, and hence probably, he thinks, pertains to the bronze period. "The Scarborough urn (Plate XI. fig. 5) is," he adds, "of the type of those that contain the burnt bones of a body, and which in all cases, except in the Coilsfield instance, have been found with the circular-marked stones."

have been of the short form, and hence of the earliest type, as the stone-coffins at Carlowrie (p. 28), and Craigie (p. 28.) The cist at Carnban, which contained the sculptured stone panel, is only four feet in length. The cist at Oatlands or Balnakelly, in the Isle of Man (see p. 19), with a cupped stone standing near it, is short also, being two feet three inches in breadth, and between four and five feet in length. Some of the sculptured sepulchral lids were small, as they merely covered urns, and hence burned bones, and are important as marking the very frequent co-existence of the cup and ring cuttings with the practice of cremation.

Within the urns and cists connected with these sculptured stones nothing has been as yet found, I believe, except tools and weapons formed of flints and other stones, with implements and ornaments of jet and bone,—all of them works of a very antique type. But, as far as the British Isles are concerned, we still greatly lack data to indicate—on any large scale—the kinds of implements which co-existed and were buried with those men whose sepulchres show the ring and cup carvings. We want also greatly any characteristic crania from such sepulchres, in order if possible to arrive at the probable race or races of the primary carvers of these rude sculptures. It is true that the human bones hitherto discovered where the urn lid or kist lid has been sculptured with rings and cups have been few, and almost always destroyed by burning; for, as just stated, the sculptures and cremation are often conjoined. But in very ancient times, with the Celt, and probably the pre-Celt and Turanian, as with the Greek, Roman; and early Saxon, the inhumation was sometimes used as well as the incineration of the body; and in the ancient tumuli of Brittany, and the cromlech sepulchres of the Channel Islands, the archaic dead have been found both buried and burned in different yet analogous barrows, and even within the same sepulchre.

In Brittany much more successful inquiries have been made than in our own country as to the contemporaneous relics and weapons of the stone carvers. We have already seen that the stones in a few of the great sepulchral barrows and chambers of Brittany have been found marked and carved,—the sculpturing in some of them, as at Gavr Inis, Locmariaker, Long Island, &c., being far more elaborate and objective than the simple rude cup and ring carvings of Great Britain,—and hence, we infer, later than them in date, unless we may hold—what is not

impossible—that the art of lapidary sculpturing advanced at a very different rate of progress in the two countries.

Many of the Brittany barrows have been opened in search of supposed treasures, &c., for years past, without the character of their contents having been ascertained; but the interiors of others, where sculptures exist, have been examined and determined with the greatest accuracy. Thus one large Brittany barrow,—that of St Michael's Mont, at Carnac,—was found to have the single large slab covering its contained cist cut with cups, like many of our Scottish stones. See a sketch of these cups on this Brittany slab in Plate XI. fig. 4. They were not, I believe, above one and a half inch in diameter each. This ruder cup-carving most probably marks this tumulus as of an age older than some of the other elaborately carved sepulchral chambers of the same district. The contents of the St Michael's Mont barrow are consequently interesting, as marking the kind of contemporaneous weapons, ornaments, &c., that were known to those men whose hands cut these cup sculpturings. There were found within the sepulchral chamber thirty-nine polished celts of jade, tremolith, and other stones; nine pendants and one hundred small beads, mostly of jasper, perforated, and hence probably the remains of necklaces; two fragments of flints; and a ring of small beads, said to be formed from the bones of a bird's leg. Fragments of the calcined bones of the occupant of the tomb were discovered underneath the floor of the chamber.¹

Another and more gigantic Brittany barrow was opened a few years ago at Tumiæ, in Arzon. On some of the slabs forming the sepulchral chamber of this Tumiæ tumulus "curious ornamental work,"²

¹ See Mr Barnwell in the *Archæologia Cambrensis* for 1862, and "Fouilles du Mont Saint-Michel," by M. René Galle.

² The ornamental work on three of the stones of the Tumiæ barrow was curious and exceptional. On one of the supporting slabs of the chamber, there was, at its upper part, a kind of double crescent, formed of two strings of circles or beads, like an imperfect necklace or collar. Lower down on the face of the same stone were four crossed and somewhat irregular lines, ending each in a very imperfect and irregular circle. On another of the stones were a number of projecting points, in rows, like small mammillary protruding pegs; and at its lower part, two parallel straight lines, which end in curves at both extremities. (See L. Galle's "Fouille du Tumulus de Tumiæ en Arzon.")

observes Mr Barnwell, "was found, and a large number of stone implements,—some more than eighteen inches long; and necklaces of stone beads, the various articles being nearly forty in number. All the stone celts had been fractured across about two-thirds of their length." "On this occasion," adds Mr Barnwell, "and indeed on all other similar ones where these chambers have been explored, no copper or bronze implement has ever been found. The articles are invariably of stone, and in the case of the grand chambers of Plouharnel, of gold." The body in this Tumiac barrow was inhumed, and without incineration, whilst that contained in the neighbouring barrow at St Michael's Mont had been burnt.¹

A remarkable sculptured slab containing carvings of hatchets, bows, &c., found in opening the tumulus of Manné-er-Hroek at Locmariaker, is represented in Plate XXXII. fig. 3. This carved slab was found amongst the stones filling up one end of the sepulchral chamber. In opening the tumulus MM. Lefebvre and René Galles dug down about thirty feet from the summit before they reached this central sepulchral chamber, which measured about thirteen feet by nine, and was about five feet high. Within it were found the following objects:—A hundred and four broken stone hatchets of tremolith and jade, one of them eighteen inches in length; two perfect jade hatchets, thirteen inches long, and of beautiful finish; five beautiful pendants of jasper; forty-four small beads in jasper, quartz, and agate; one prism of crystalline quartz; three pieces of sharp cutting flint; a quantity of charcoal; and some fragments of pottery. Earthy matter covered the floor to the depth of about a foot and a half, but no trace of bones or animal matter could be detected.

Weapons and ornaments of bronze have been found within some megalithic tombs and cromlechs, analogous in their type of building to those of Tumiac, St Michael, and Manné-er-Hroek.² When discovered they have

¹ *Archæologia Cambrensis* for 1862, p. 335.

² Baron Bonstetten, in his "Supplement d'Antiquities," states that in the megalithic tomb at Plouharnel a kind of ligula in bronze was also found; and more lately, in his "Essai sur les Dolmens," he adduces a few rare and exceptional instances of bronze implements being found in these catacombs in France and Spain, though throughout Northern and Western Europe their general and primary con-

been found usually, if not always, in circumstances showing that they were most probably introduced secondarily, or later than the primary age and use of the catacombs. Indeed layers, showing different and distant burial deposits, have been repeatedly found along with relics and bones displaced laterally to admit of the interment of others. Dr Lukis has specially pointed out this fact in relation to the megalithic catacombs in the Channel Islands, where he had an unusually favourable opportunity of studying the contents of these tombs and their interior arrangements, in consequence of their cavities having in long past times become silted up—and stereotyped, as it were, for modern investigation—by layers of sea-sand. We have figured a specimen of cup-carvings on the props of one of these cromlechs (see Plate VIII. fig. 2). In one only, however, of the many archaic sepulchres which he examined did Dr Lukis find an implement of bronze. In this instance, in the upper layers filling the interior of a cyclopic chambered tumulus in Guernsey, covered by nine capstones, he discovered beneath one of the capstones an ancient armlet made of a copper alloy. In subsequently pursuing his researches downwards among the contents of this megalithic tomb, Dr Lukis states that he “arrived at the usual varieties of pottery, bearing evidence of greater age . . . accompanied by many stone instruments, mullers and mills of granite;” and he believes the metallic armlet—and another found near it of jet, pretty highly ornamented—must have been placed within the cromlech for security or otherwise at a subsequent period.”¹ Elsewhere he has stated that,—with this spurious exception,—in all his extensive re-

tents are entirely of the stone age. But cromlech building, we must remember, has extended to other districts of the world, and has in them extended onwards into later periods. As proof of the occasional posterior introduction of relics into cromlechs with *secondary* interments or otherwise, M. Bonstetten states, that inside an archaic “dolmen” at Locmariaker, and sunk down twice the depth of some remains of archaic pottery and flints, two statuettes in terra-cotta of Latona, coins of the second Constantine, and some Roman pottery, were found. Messrs Christy and Ferand opened fourteen cromlechs near Constantin, in Africa, and discovered in their interior, besides the corpses,—which were buried in a bent or contracted position,—worked flints, bits of pottery, rings of copper and iron, and in one instance, a coin of the Empress Faustina, who died 200 A.C. (See *Recueil de la Société Archéologie de Constantin* for 1863, p. 214.)

¹ Journal of the British Archæological Association, vol. iii. p. 344.

searches among the deposits within the megalithic sepulchral chambers and cromlechs of the Channel Islands, "no metallic instruments nor ornaments were discovered, nor even indications of the knowledge or use of metals."¹

We have had several megalithic catacombs and cists opened in England of late years, as at Rodmarton, Uley, Littleton Drew, West Kennet, Long Lowe, Nympsfield, Arlington, &c., where the relics found interred with the dead were entirely those of the Stone age; but the walls of these olden tombs have not been examined with the necessary care for the discovery of cup and ring markings, and possibly none may be present. In the field adjoining the sculptured stones of Largie, in Argyleshire (see anteriorly, p. 34), a megalithic round tumulus with three chambers or compartments in it was lately examined by the Rev. Mr Mapleton and Mr Greenwell. One of the three chambers was nearly twenty feet long. They found within these catacombs burnt and unburnt bones, charcoal, flints, and several urns or rather portions of urns, some of which were ornamented externally. The Rev. Mr Greenwell believes, from the examination which he has made of this great barrow, that the dead deposited in it at different periods were at one time inhumed and at another burned. But he concludes further—contrary to the general opinion on such subjects—that the age of cremation in this tumulus preceded, and perhaps long preceded, the age of burial.

At present I am not aware that within any of the sepulchres, whose stones are marked only with the incised ring and cup cuttings, any kind or form of metallic tool or instrument has yet been found. Should further and more extended observation confirm this remark, then it will naturally follow that the *commencement* of these sculpturings must be thrown back to the so-called Stone period, or to an era anterior to the use

¹ I have mentioned anteriorly (p. 65) Mr Conwell's discovery at Slieve-na-Calligh, in Ireland, of an extensive old "city of the dead," containing a great number of chambered tumuli with carvings on their stones. In one of the crypts of one of these chambered cairns Mr Conwell found what in all probability were the remains of a secondary and late interment, viz., a few fragments of iron and of small bronze rings and glass beads. No similar metallic relics have hitherto been found anywhere else in this large necropolis, except a bronze pin, probably also a secondary introduction.

of metals; unless, indeed, we can imagine, with some archæologists, that in consequence of the extreme age, moisture, &c., of these places of interment, any bronze or iron articles deposited in them have disintegrated and totally disappeared in consequence of the destructive oxidation of the metals—an idea contradicted by the chemical fact that the human and other bones have been more or less spared under conditions which, on this supposition, have removed all the metallic objects.

I have no doubt, however, that at whatever time the simple cup and ring sculptures were first begun to be cut, the practice of carving them—if it did not initiate in—was at least continued into, and indeed extended during the so-called Bronze era, and perhaps till a later period;¹ for bronze tools and ornaments have been occasionally found in localities in Argyleshire, Northumberland, and elsewhere near to spots where the sculptures exist in unusual numbers; though none yet have been discovered, as far as I am aware, in immediate and direct connection with these carved stones or cists themselves.

Mere peculiarities in the artistic type of the figures found cut on stones and metals, on pottery and bone, &c., have been sometimes held as suffi-

¹ Last century an example of lapidary circles, &c., was found upon the sepulchral slabs of a cist which contained iron weapons. The discovery was made in opening a barrow at Aspatria in Cumberland, and is casually described by Mr Rooke in the *Archæologia*, vol. x. p. 113. On digging the barrow, a stone cist was exposed containing the skeleton of a tall man. Beside the skeleton lay a long iron sword and dagger, their handles ornamented with silver; a gold buckle and a figured ornament, in the end of a piece of belt; with remains of a shield and battle-axe, and of a horse-bit and spurs, all very much corroded by rust. The stones marked were two cobblestones which inclosed the west end of the cist. The sculptures upon them consisted of single and double rings, some with cups and others with crosses in their centres. One of the stones had on it "marks which resemble" letters, but none such are visible in the accompanying sketches in the *Archæologia*. These lapidary rings, however, differed entirely from all the British forms described in this essay, as their "rims and the crosses within them are cut in relief,"—raised and not incised. Lately I made, through Mr Page of Carlisle, full inquiries after these stones of Aspatria, but unfortunately they have disappeared. The crossed circles or discs on these Aspatria stones is common on Scandinavian stones (see anteriorly p. 73); but I know no other example of it in Great Britain. The relics are such, as we would expect to find in a Scandinavian grave, and probably mark the interment as a result of the Scandinavian settlement of Cumberland.

cient criteria for determining the age of their production. Thus the pottery, for instance, of the Stone and of the Bronze age, shows usually on its surface only dots, nailmarks, and compositions of straight lines, from the markings of cords or thongs upon the soft clay; and occasionally, in addition, we find some curved, circular, and spiral lines. It has been stated by various antiquaries,¹ that, on the contrary, while all attempts at the representation of natural objects, as plants, animals, weapons, &c., are rare, the ornamentation of the bronze age is specially characterised by combinations of circular, spiral, and sometimes zigzag lines; and certainly such are the geometric patterns generally seen on the most ancient bronze ornaments and weapons—whether we regard these combinations and peculiar types of decoration as foreign or native, Semitic or Aryan, Asiatic or European, Eastern or Western, in their origin. Again, however, if we turn to carvings on stones, we find that in some localities, apparently before metals were much if at all used, archaic man attempted to cut representations of external objects, as celts, animals, &c., upon the walls of his sepulchral chambers, as we have already seen (p. 69–70) in the cromlechs and chambered tumuli of Brittany. While we are not entitled, then, to draw any strong inference as to the age of the lapidary cup and ring sculptures from their artistic characters being supposed to be comparable with the geometric forms of ornamentation of the Bronze era, we are yet perhaps entitled to hold that—from their rudeness in artistic type—our Scottish and English cup and ring sculptures are earlier than those lapidary carvings and representations of natural and artificial objects which, along with circles and zigzags, exist in the cairns of Brittany;—and are consequently, according to this mode of reasoning, to be carried back with them in their origin to the so-called Stone age.

But the very formation and cutting of such lapidary cups and rings has been supposed of itself to involve the use of metallic tools. Let us, therefore, in the next chapter inquire for a moment into the soundness of this opinion.

¹ See Kemble's *Horæ Ferales*, p. 78; Lubbock's *Prehistoric Times*, p. 25; and Nilsson's *Skandinaviska Nordens Ur-Invanare*, p. 2, &c. Professor Nilsson and his school regard all the earlier and finer ornamentation upon our archaic bronzes as Semitic or Eastern, and not Celtic or Western, in their origin.

CHAPTER XVIII.—THE KIND OF TOOLS BY WHICH THE CUP AND RING CUTTINGS WERE SCULPTURED.

It has been argued that such sculpturings could not belong to the distant and so-called Stone age in archæology, because they could not have been cut except by metallic implements. In speaking, for example, of some sculptured stones in the sepulchral chambers and cromlechs of Wales and Brittany, Dr Lukis observes that it is difficult to conceive the possibility of the stones being cut by any but metallic tools (*Archæologia*, vol. xxxv. p. 250). MM. Merimée and Cloismadeuc express a similar opinion as to the impossibility of sculpturing the stones of Gavr Inis without metallic implements (*L'Ile de Gavr Inis*, &c., p. 14).

In most localities the ring and cup cuttings are found chiefly, and in some instances solely, carved upon the comparatively soft and easily worked sandstone rocks of the district. In Northumberland, as already stated, all the sculptured rocks hitherto discovered are sandstone, while the older and harder rocks in the neighbourhood of the sculptured stones show no markings whatever. But in other localities the rings and cups are engraved on stones and rocks far more difficult to cut, as on whinstone in the cromlech near Ratho; on dense schist as in Argyleshire; or on hard primitive granites, syenites, &c., as on the stones at Rothiemay, Midmar, &c. The presence, however, of the rings and cups upon these harder and more primitive rocks does not necessitate the knowledge and the use of metallic tools on the part of the sculptors. For I have found experimentally that the rings and cups can be engraved deeply and without difficulty upon the Argyleshire schist, and even upon hard Aberdeen granite, with a flint celt and a wooden mallet. In the Edinburgh Antiquarian Museum there is a block of grey Aberdeen granite from Kintore, forming one of the sculptured stones of Scotland, and containing upon one side two crescents, &c. (See it figured in Mr Stuart's "Sculptured Stones of Scotland," pl. cxi. fig. 3.) On the back of this hard granite Mr Robert Paul, the doorkeeper of the Museum, tried for me the experiment I allude to, and cut, in two hours, two-thirds of a circle with a flint and wooden mallet. The flint used was about three inches long, an inch in breadth, and about a quarter of an inch in

thickness. The circle which he sculptured with it in the granite was seven inches in diameter; and the incision itself was nearly three quarters of an inch broad, above a quarter of an inch in depth, and very smooth on its cut surface. In hewing out the circle with the flint, its sharp tips from time to time broke off, but another sharp edge was always immediately obtained by merely turning it round.

The result of this simple and decisive experiment seems to me to be important, as showing that if these archaic cuttings could be sculptured alike either by stone or by metallic tools, their mere character and form afford no evidence whatsoever that they were not carved till after the discovery and use of metallic implements. In other words, the experiment shows that they might have been produced before the introduction of metals—or during the Stone age.

CHAPTER XIX.—THEIR ANTIQUITY AS SHOWN BY THEIR GEOGRAPHICAL DISTRIBUTION IN THE BRITISH ISLANDS.

The ring and cup sculpturings have been found in many of the inland districts of England and Scotland. But—for the sake of argument only—let us look at their distribution for a moment in districts nearer our shores. Taking this view of their localisation, we find that they have now been discovered along the *whole length* of the British Isles, from Cornwall and Dorsetshire in the south to Orkney in the far north; and also across their *whole breadth*, from Yorkshire and Northumberland on the eastern coast of England to Kerry on the western coast of Ireland. At these distant and diverse points, and in the mainland districts between them, they everywhere present a sameness of type and form, showing—like a peculiar language—a sameness among the race or races that carved them. In other words, they all evidently indicate, wherever found, a common thought of some common origin, belonging to a common people. But how very long is it since a common race inhabited, simultaneously or successively, the four different and distant parts in the British Islands that I have just named, and dwelt also in the inland and intervening districts? Yet it was evidently at some such remote date that these rude and simple lapidary carvings were primarily

and chiefly made; and the last question that meets us is, What race or races cut them?

CHAPTER XX.—THE RACE THAT FIRST INTRODUCED THE CARVING
OF THE LAPIDARY RING AND CUP SCULPTURINGS.

British historical records can only be truly said to begin with the notices of our Island and its inhabitants left us by Julius Cæsar, half a century before the commencement of the Christian era. At that date the population appears to have been mainly Celtic, but partially also Belgic and Iberian (if we may trust to the subsequent observations of Tacitus upon "the dark and curly-haired Silures"); and many have held that the Celts—including the two divisions of the Cymry and Gael—were the aborigines of these islands. During the ten or twelve centuries that followed the commencement of our historical records, we know that England was subdued and overrun by four different races of conquerors, viz., by the Romans, the Saxons, the Danes, and the Normans; and during the long prehistoric ages that preceded the notices left by Cæsar, our country was probably then—as afterwards—the seat and scene of repeated immigrations of new inhabitants and conquerors. For we know that when the curtain of western European history first rises in Pre-Christian times, it affords us strange glimpses of whole nations and hordes, like the Cimbri and Helvetii, changing from site to site in greater and smaller masses in quest of new settlements and new conquests. By the era of the first Roman invasion of Scotland, A.D. 81, our forefathers were already so advanced in civilisation as to build and use war chariots—a fact in itself showing no mean progress in the mechanical arts; and they had ere this time passed through the era of bronze weapons, for they fought at the battle of the Mons Grampius with what, to the Roman eye, seemed huge (*ingentes*) swords, large and blunt at the point (*enormes gladii sine mucrone*),¹—a form of weapon which we can only suppose to have been made of iron.²

¹ Tacitus, *Vita Agricolæ*, § 32.

² A century and more before Agricola invaded Scotland, Julius Cæsar had found the Celtic nations of Gaul provided with long two-edged iron swords (see Livy,

We have no adequate data as yet to fix the date of advent to our shores of the Cymry and Gael, and to determine whether or not they brought along with them, at their first arrival, as some hold, a knowledge of the metallurgic arts. But much evidence has been gradually accumulating of late years to prove that there had existed some pre-Celtic races in Britain.¹ Without venturing in the least to point out all,

xxxviii. 17 and 21). Diodorus Siculus states that they had also spears formed with a long blade of iron, and had invented iron coats of mail (V. 30). When the Roman armies first encountered those of Gaul in 222 B.C., the Gauls were even then, according to Polybius (ii. 33), provided with iron swords; but the metal was soft, and bent in battle. It was, says Mr Aiken, when describing this circumstance, "of the kind at present called 'hot-short,' a defect which," he adds, "much of the iron now made in the southern departments of France is very liable to" (*Illustrations of Manufactures*, p. 251). When Julius Cæsar attacked by sea the Veneti, or inhabitants of Armorica, in the year 56 B.C., he found them furnished with a strong fleet of oak ships, above two hundred in number, clinker-built with large iron nails, and the anchors of the vessels provided with chain cables of iron. In a very suggestive chapter in his late interesting work on the "Early Races of Scotland," Colonel Forbes Leslie hints that the Veneti owed probably their knowledge of naval architecture to the previous influence of Phœnician art and science among them (p. 47 to 61).

¹ Perhaps comparative philology, and the study of the ancient names of some of our mountains, rivers, and places, may yet afford the archæologist surer means than we generally use of ascertaining the presence in this island, in ancient times, of races before the Celtic. That Iberians, speaking the Basque or Euskarian language, partially inhabited the southern and western parts of Great Britain in the time of Tacitus, and long previously, is generally admitted to be of high probability; and their presence in western Europe is held by most ethnologists to be ante-Celtic. Perhaps they will yet be found to have left some of their language and appellatives not in south Britain only, but even far northward. One of the best known provinces of Spain bears the Basque name of Asturia, or, in other words, a district of "river and rock," from *Asta*, rock, and *Ura*, water. In Scotland we have the Basque word "*Ura*" forming—apparently now in modified forms—the names of various streams and lakes, possibly before the advent of the Celts; as the rivers and lochs Ure, Urr, Ury, Ore, Orr, Ayr, Aire, Yar, &c., used either singly, or as prefixes and affixes to other names. Tacitus tells us that Agricola, after passing the isthmus formed by the estuaries of the Clota and Bodotria (Clyde and Forth), stationed his army during the winter before the battle of the Mons Grampius, or A.D. 83, in the land of the "*Horesti*," a district which is usually supposed to be Fife, or more probably the southern part of Perthshire. May this term "*Horesti*"

let me simply note two or three. A race of Megalithic Builders—if we may so call them—who have not left in their sepulchres, and therefore we infer did not possess, in their earlier era at least, any metal tools or weapons, seem to have either preceded the Celts, or to have formed our first Celtic or Aryan wave; and judging from the extent of their remains in massive chambered catacombs and cromlechs, in numerous cyclopean forts, gigantic stone circles, &c., they must have held the country for a considerable length of time, and overspread the whole of it by the diffusion of their population. From their remains, as left in their tombs and elsewhere, we know that they employed weapons and tools of horn, wood, and *polished* stone; manufactured rude hand-made pottery; had ornaments of jet, bone, &c.; partially reared and used cereals, as indicated by their stone mullers and querns; and possessed the dog, ox, sheep, and other domestic quadrupeds. I do not stop to discuss the various questions whether these Megalithic Builders did or did not hollow out and use the archaic single-tree canoes found on our shores, rivers, and lakes;—whether they were the people that anciently whaled in the Firth of Forth with harpoons of deer-horn, when its upper waters were either much higher or its shores much lower than at present;—whether they or another race built the earliest stone-age crannoges or lake habitations;—and again, whether there was not an antecedent population of simple fishers and hunters, totally unacquainted with the rearing of corn and cattle, and who have bequeathed to Archæology all their sparse and sole historic records in casual relics of their food, dress, and weapons buried in heaps and mounds of kitchen refuse which they have incidentally accumulated and left upon our own and upon other northern and western coasts of Europe. Whether these formed one, or two, or more races, let me add, that long anterior to the Megalithic Builders

not be composed of the same elements as the Basque word *Asturias*, but reversed; the *Ura* or *Or* being placed first, and the *Asta*, or *Esta*, being last; and the whole signifying—like the analogous Euskarian word—“a land of rivers and rocks, or hills?” Sometimes the accidental change of a single letter makes the recognition of an old word very difficult, as in the instance of the word cited above (*Bodotria*). It has been often said that there is no traceable relation between the river Forth and this its old Latin name *Bodotria*. But the properly spelt form was possibly *Fodotria*, and if so, the analogy between it and Forth then becomes self-evident.

there certainly existed in our Island a tribe of inhabitants that dwelt, in part at least, in natural or artificial caves, where their bones and their contemporaneous relics have been found; who possessed implements and weapons of stone and flint, but rough, and *not* polished like those of the Megalithic Builders; who seemingly possessed no pottery; who—if we may judge from the want of rubbers and querns to grind corn food—had little or no knowledge of agriculture; and who lived in those far distant times when the colossal fossil elephant or mammoth,¹ the woolly-haired rhinoceros, the gigantic cave-bear, the great hyæna, &c., were contemporaneous inhabitants with him of the soil of Britain; when the British lion² was a veritable reality and not a heraldic myth; and when possibly England was still geologically united to the Continent, and the Thames was only a tributary of the Rhine. I am not aware that we have yet sufficient evidence to consider as of the same family with these ancient Cave-men, or as of a race still anterior to them, the Flint-folk of the southern counties of England, whose *unpolished* flint hatchets—besides being found in great abundance on the banks of the Somme and Loire—have been discovered in various parts in the river-drifts of south England, and an excellent specimen of which, along with the bones of an elephant, was dug up, in the last century, from a gravel-pit near Gray's Inn Lane, in the centre of London itself.³ It sounds like an archæological romance

¹ According to Professor Buckland the fossil elephant was—judging from the specimen found in the ice at Tunguss—"clothed with coarse tufty wool of a reddish colour, interspersed with stiff black hair, unlike that of any known animal; that it had a long mane on its neck and back, and had its ears protected by tufts of hair, and was at least sixteen feet high." (See his *Reliquæ Diluvianæ*, p. 172. See also a drawing and description of it in Figuier's "World before the Deluge," London, 1865, p. 350.) Between the years 1820 and 1833, on the coast of Norfolk alone, the fishermen, in trawling for oysters, have fished up no less than two thousand molar teeth of the fossil elephant—one proof among others of the former abundance of the animal in this part of the world. (See *Ibid.* p. 336.)

² The *Felis spelæa* or pleistocene lion, has (observes Mr Owen) left its remains in many stratified deposits of the pliocene period in Britain (*Palæontology*, p. 384). It measured, if we may judge from its remains, "four yards" in length, according to Figuier, "with a size exceeding that of the largest bull" (*World before the Deluge*, p. 354). Lately Messrs Dawkins and Sandford have shown that the *Felis spelæa* is a large variety only of the *Felis Leo* (Palæontographical Society Essays, vol. xiii.)

³ The original account of the discovery of this British elephant and the stone axe,

thus to find the rude weapon of an archaic Briton, who hunted of yore on the ground where the metropolis of England now stands, apparently lying alongside of a skeleton of the wild game which he then and there pursued,—and that game nothing less than a British elephant.¹ What

as given in a letter written by Mr Bagford in 1715, and published in Hearne's edition of Leland's *Collectanea*, vol. i. preface, p. lxiii., is probably worth quoting. Mr Bagford is not, of course, aware of the specific difference between the British elephant (*Elephas primigenius*), whose fossil tusks, teeth, and bones, often turn up in our soil, and the African and Asiatic elephant (*Elephas Africanus* and *E. Asiaticus*), known to the Romans. After speaking of the antiquarian zeal of Mr John Conyers, Mr Bagford remarks:—"Tis this very gentleman that discovered the body of an elephant, as he was digging for gravel in a field near to the sign of Sir John Oldcastle in the fields, not far from Battlebridge, and near to the river of Wells, which, though now dried up, was a considerable river in the time of the Romans. How this elephant came there is the question? I know some will have it to have lain there ever since the universal deluge. For my own part, I take it to have been brought over, with many others, by the Romans in the reign of Claudius the Emperor, and conjecture (for a liberty of guessing may be indulged to me as well as to others who maintain different hypotheses), that it was killed in some fight by a Briton; for not far from the place where it was found a British weapon, made of a flint lance, like unto the head of a spear fastened into a shaft of a good length, which was a weapon very common amongst the ancient Britons, was also dug up, they having not at that time the use of iron and brass, as the Romans had. This conjecture may perhaps seem odd to some; but I am satisfied myself, after having viewed this flint weapon, which was once in the possession of that generous patron of learning, the reverend and very worthy Dr Charlett, Master of University College, and is now preserved among the curious collections of Mr John Kemp, from whence I have thought fit to send you the exact form and bigness of it." A rude figure of this flint weapon was published by Hearne; and a more careful one is given by Mr Evans in one of his excellent papers on Flint Implements in the Drift (see the *Archæologia*, xxxviii. p. 301). This London flint weapon is not smooth and polished like those found in the Britanny and other megalithic tumuli and cromlechs, but rough, unpolished, and similar in shape, size, and form to those found on the banks of the Somme and Loire. It is now preserved in the British Museum.

¹ Dr Buckland enumerates various localities in the valley of the Thames where the remains of the mammoth have been discovered. These remains seem to be specially frequent on the site of London. "In the streets of London," he observes, "the teeth and bones are often found in digging foundations and sewers in the gravel." Again, he speaks of the remains occurring "in almost all the gravel pits round London," (see his *Reliquiæ Diluvianæ*, pp. 174, 175);—as if forsooth the site of the

a contrast do such antiquarian revelations suggest between the objects of pursuit of the archaic and of the modern Londoner!

To which of these races of men, or to what others, should we refer the first sculpturings of the cup and ring cuttings which we have been considering in the present essay? The question is one which, in the present state of archæological knowledge, cannot be positively answered. Many additional data are required,—particularly in the way of more careful and correct observations on the contemporaneous works and relics with which the sculptures are generally connected; and also on the extent of their diffusion. Do they exist over Europe generally, or are they limited to special localities in it? Sculptures, analogous, at least, to the cup and ring carvings of Britain, are, we have seen (see p. 71), traceable in Scandinavia. Are they common in that or other countries which the Celtic race never reached? But still more, are they to be found in the lands of the Lap, Finlander, or Basque, which apparently neither the Celt nor any other Aryan ever occupied? Do they appear in Asia within the bounds of the Aryan or Semitic races? Or can they be traced in Africa or in any localities belonging to the Hamitic branches of mankind? Do they exist upon the stones or rocks of America or Polynesia?

But we have some data which perhaps entitle us to suggest a possible approximate opinion on the question of the race or races that first cut these cup and ring carvings. They have now been found in sufficient abundance upon the stones of the chambered catacombs, cromlechs, and megalithic circles of this country, of the Channel Islands, and of Brittany. We have already, a few pages back, seen that the relics found in some of the chambered catacombs where these rude lapidary sculptures are carved, belong entirely to the Stone period, and consequently we infer that the age of the earliest of these sculpturings—as found in this connection—was the Stone era. But further, if any of them were thus carved in the Stone age, they were carved—according to the chronological opinions of most archæologists—anteriorly to the advent of the Celt to our shores.

English metropolis had been formerly a favourite haunt and home of the gigantic English mammoth. In Plate XXI. he represents a section of the cave called Goat-Hole, in Glamorganshire, where an elephant's head and human skeleton are marked on the spot in which they were actually found—lying near to each other (p. 275).

Besides, on another ground, we believe the earlier of these stone carvings are possibly anterior to the age of the Celt, namely, because they are found—though hitherto but sparingly—on cromlechs and dolmens; and cromlech-burying and building is not characteristic of the Celt; for in all probability this form of sepulture—involving, as it does, a rude but quaint type of architecture often so massive and gigantic as to be difficult of execution—was commenced and practised anterior to his arrival in our Island and in Western Europe. For though found in some countries—like Brittany, Cornwall, Wales, Ireland, &c.—inhabited since the beginning of the historical era by the Celt, yet both the simple and galleried cromlech are relatively or entirely wanting in other countries—like Cisalpine Gaul and some of the most central and eastern provinces of ancient Gaul¹ itself—districts that were assuredly Celtic in their popu-

¹ In his excellent essay, *De la distribution des Dolmens sur la Surface de la France*, M. Bertrand points out that, geographically, these megalithic structures—"dolmens," and open galleried cromlechs or chambered barrows—exist chiefly on the islands, capes, and coasts of Northern and Western France, from the mouth of the Orne to the mouth of the Gironde; that in the interior of the kingdom they are met with principally in proximity to the course of navigable, and particularly of large, rivers that they are almost entirely wanting, however, along the chief ancient tracts of Celtic and Pre-Roman commerce by the valleys of the Rhone, of the Seine, Soane, and Upper Loire; that they are similarly sparse and deficient in the last, and in the very heart of ancient Gaul or in the olden Celtic districts of the *Ædui*, *Senones*, *Lingones*, *Bituriges*, *Arverni*, *Cenomani*, *Boii*, and *Ambarri*, except at some points where these districts are penetrated by the rivers Garthe, Eure, and Orne; that they apparently belong, in their larger and most massive forms, chiefly to the latter part of the Stone age, and to a population which generally buried and did not burn the dead; and that their builders did not migrate across France from east to west, but penetrated first from the sea-shore, and by its rivers, into the western portions of the kingdom. Baron Bonstetten, in his *Essai sur les Dolmens*, endeavours to show that—as far as we can judge from the aggregations and chains of stone relics that they have left—the race of cromlech-builders, along both of the shores of the western portion of the Baltic, through Denmark and the Danish Isles, onwards to the northern parts of Holland, stretched their habitations at the same time from the shore inward into Mecklenburg, Hanover, &c. According to the same author, without remaining in Belgium, they seem to have passed onward into France, following the geographical points and routes pointed out by M. Bertrand. They crossed over into Great Britain, and occupied principally its western section

lation in the earliest historical times. Besides, it is a form of sepulture which has been followed in countries, as Scandinavia, where the Celt never dwelt, and in others, again, where neither the Celt nor any other branch of the Aryan race ever penetrated, as in Barbary, Constantin, Algiers, Oran, on the banks of the Jordan, &c.¹ In other words, the race that erected

and the eastern and southern section of Ireland. Arrived at the Gironde, they left the sea-shore, avoided the travelling difficulties of Gascoigne, and crossed southern France, obliquely in the direction of the Gulf of Lyons. Thence their remains are found running like a broad belt along the whole northern and western shores of the Spanish peninsula. They reappear in Grenada and Andalusia, on the southern coast of Spain, and stretch southward across the Mediterranean to Algiers, Constantin, and other parts of northern Africa; and perhaps passed, Baron Bonstetten suggests, to Egypt, and there formed the Tamhu (or men of the north) under Rameses [who, we may remark, are represented in the Theban tombs with leather dresses and tattooed limbs]. All the more northern cromlechs that remain in Europe are found to be of the Stone age. But as we pass southwards, bronze implements, at first seemingly altogether of foreign manufacture, gradually, though sparingly, appear, till at last, in the cromlechs of Africa, bronze, stone, and iron are found mixed up together in their contents. In this long pilgrimage the race of cromlech-builders, whilst apparently always keeping near to the sea-shore, still spread to a certain distance inwards for pasture and food for their flocks, which consisted evidently, from the various relics left, of the ox, sheep, horse, &c. Their weapons in the earlier and northern part of their European journey seem to have been entirely those of the Stone era, with the celts, axes, beads, &c., in some instances highly worked up and polished. Baron Bonstetten—whose account I have been following—further believes that, before appearing on the shores of the Baltic, they had passed or been pursued across Europe from the Black Sea and Caucasus,—and perhaps from still more southern districts,—where their remains are traceable; and that at different times they sent away offshoots that reached India, Palestine, Greece, Etruria, and elsewhere. In their long pilgrimage from the Baltic to the African shores of the Mediterranean, the nomadic race of cromlech-builders formed, Baron Bonstetten maintains, a pastoral people, living upon the products of their flocks, and upon fishing and hunting; and he holds, that the chain of cromlechs which they have left in their long and probably slow migration from the shores of the Baltic to the frontiers of Egypt, are so similar in general type as to prove the identity of the great tribe or nation of men who, out of veneration for their dead, reared them;—and yet the very name of this people is lost in prehistoric darkness. They succeeded, in his opinion, to the Cave-men of the west; but preceded all historical races. He adds an interesting map illustrative of his ideas of the geographical course and extent of their pilgrimage.

¹ See the observations of Mr Rhind in *Journal of Archæological Association*, vol. i.

megalithic cromlechs has been much more widely diffused over the world's surface than the Celtic; possibly, or indeed probably, sojourned in our country before them;¹ and in other parts, as Greece, pre-existed the oldest remains of the earliest traces of historic civilisation.²

(1859), and in the *Archæologia*, vol. xxxix.; Shaw's *Barbary and Levant*, p. 67; Irby's *Travels in Syria and the Holy Land*; Madden in *Transactions of Royal Irish Academy* for 1863, p. 117; Sir Gardner Wilkinson, in *Journal of Archæological Association* for 1862, p. 43, &c.

¹ Archæologists, very zealous for the continuation of the most archaic practices down to the most modern times, might argue that the old memorial standing stones and slabs are perpetuated in our present churchyard obelisks and upright grave-stones; and that cromlechs have *their* prototypes in the table or flat form of tomb-stone supported by lateral slabs or by stone props, that is so common in many of our Christian burying-grounds. In the churchyard of Santon, Isle of Man, is a very massive unhewn slab, formerly supported by corner-stone props, and which no doubt formed, before it fell, no contemptible specimen of a cromlech. In 1656, the vicar of the parish, Sir John Cosnaghan, was—in consequence of a strong desire expressed by him before death—buried under this, “The Great Stone,” as it was then termed. But for a far more interesting notice of the continued construction in the present day in Upper India of cromlechs of this form, and other megalithic structures, see Dr Hooker's “*Himalayan Journal*,” vol. ii. p. 276.

² We have already alluded in a preceding footnote (see p. 99) to the very ancient tombs or so-called treasuries at Mycenæ; and they afford us a kind of chronometer of the great age of our European cromlechs. For, near Mycenæ, there is an old cromlech of the usual form, built of massive unhewn stones, according to the common type and arrangement. (See a sketch of it in Bonstetten's *Essai sur les Dolmens*, p. 41). How very much older must this rude megalithic structure be than any of the ruins in the city of Mycenæ itself, archæic as these ruins are? The so-called tomb of Atreus or Agamemnon is usually considered as reaching to twelve or more centuries B.C. (see Gell, Hughes, Clarke, &c.), “the remains of Mycenæ being,” to use the language of Mr Dodwell (*Travels*, &c., vol. ii. p. 229), “enveloped in the deepest recesses of recorded times.” The tomb is of the form of a gallery, chamber, and side crypt, very analogous in type to that of New Grange and other western catacombs; but its stones are polished and hewn, and the ornaments upon its pillars are, from the specimens left, of a simple yet elegant character. (See footnote in a previous page, 99.) The enormous lintel stone placed over the entrance of the dome-shaped chamber or tomb may “perhaps (observes Dr Clarke) be mentioned as the largest slab of hewn stone in the world” (*Travels*, 4th ed., vol. vi. p. 503). If these tombs are, as usually believed, thirty centuries old, the rude unhewn cromlech near Mycenæ, and other similar cromlechs, must be many

It appears to me not improbable, therefore, that the race of Megalithic Builders, whether Celtic or Pre-Celtic, who had tools of flint and polished stone, first sculptured our rocks and stones with the rude and archaic ring and cup cuttings. But the adoption, and even more extended use, of these forms of ornamental and possibly religious symbols passed down, in all likelihood (with their sepulchral practices, and with other pieces of art and superstition), to the inhabitants of the Bronze age, with its era of cremation and urn-burial,—and thence onwards to other and later times; and perhaps they can be still traced in the spiral, circular, and concentric figurings upon our ancient Celtic bronze weapons and ornaments; on their stone-balls and hatchets; on ancient bone implements and combs; and even possibly among some of the symbols of the so-called “Sculptured Stones” of Scotland.¹

It is important, at the same time, to recollect that the *origin* of the cup and ring cuttings may be still older than even the age of the earliest Celts or of the Megalithic Builders, for no doubt man attempted to carve and sculpture at a still earlier epoch in his history. We have proofs of this in the works of the archaic Cave-men of the Dordogne in France, who were contemporary in that district with the reindeer, had no pottery, and apparently possessed no domestic animals—not even the dog. Among their cave relics² there have been found several rude draw-

centuries older still. Let me merely add here, that the so-called Gate of the Lions at Mycenæ—built, along with its cyclopean walls, at a very early period of the city's existence—is archæologically interesting as the oldest piece of known lapidary sculpture in Europe; and it is interesting to connect with it the other fact, that scenes in the Agamemnon of Eschylus and the Electra of Sophocles—plays written four or five centuries before the commencement of the Christian era—are placed by their ancient authors in front of this very archaic sculptured gate, the remains of which continue comparatively entire down to our own times.

¹ See, for instance, the drawings of these Sculptured Stones in Mr Stuart's magnificent work on the subject in Plates IX., XXV., XXVII., &c.

² See M. Lartet's *Cavernes du Périgord; objets gravés et sculptés des temps Pré-historiques*, &c. See especially the drawings in pp. 20, 29, and 31. Latterly M. Lartet has found in these caves a broken plate of ivory, scratched with a portrait of the mammoth, and evidently executed by one who had himself seen this fossil elephant. (See a copy of this remarkable portrait in the *Annales des Sciences Naturelles*, 5^{me} série; *Zoologie et Paléontologie*, tom. iv. Pl. xvj.)

ings of animals, &c., scratched on bone and stone, apparently by means of the sharp point of a flint implement; and a poinard made of the horn of a reindeer, and having a rude attempt at the carving out of the form of that animal upon the handle of the weapon. It is possible, as I have already ventured to hint, that the examination of the *walls* also of these old inhabited caves and rock-shelters may yet detect upon them also some attempts at lapidary cuttings or sculpturings,—and none could be well conceived of a more primitive and rude type than the cup and ring cuttings described in this essay.

APPENDIX.

(See *ante*, p. 110.)NOTICES OF SOME ANCIENT SCULPTURES ON THE WALLS OF
CAVES IN FIFE.*

THE county of Fife abounds in caves or “weems”—a derivative from the Gaelic name for caves—and their existence gives a title to the earldom of Wemyss. Some of the caves in Fife are historical, as St Rule’s at St Andrews, St Adrian’s near Elie, and St Margaret’s at Dunfermline. St Serf of Culcross, the great patron saint of the west of Fife, is described by one of his biographers as having usually spent the forty days of Lent in a cave named, as such retreats often were, the *Desertum*. This cave at the *Desertum*—(or Dysart, to use the modern form of the name)—was used as a church up till near the time of the Reformation. About two miles eastward of Dysart, and near the village of Easter Wemyss, there is a range of large caves, seven or eight of which are at the present time open; but probably several more exist, having their openings covered over with fallen and accumulated debris. They stand about ten or twenty feet above the level of high tide. Some of them are eighty to a hundred feet in length, and of corresponding height and breadth. Two or three of them are perfectly dark, and require to be entered with candles. Last summer, when on a professional visit to Fife, I made a hurried visit to two of these caves, the Gas-work and Court Caves, along with Dr Dewar, Kirkcaldy, and saw some rude

* Extracted from the *Proceedings of the Royal Society of Edinburgh* for 2d January 1866, Vol. v. p. 521, &c. One or two observations which I have already expressed in the preceding essay may be found to be repeated in these Notices; but it did not seem necessary to obliterate or alter them.

sculpturings in the last of these. This discovery induced me to return for further search, accompanied by my friends, Drs Joseph Robertson, Duns, and Paterson, when two or three new caves were visited—particularly Jonathan's Cave and the Doo Cave—and their walls found to be covered at different parts with representations of various animals, figures, and emblems.

The cave sculpturings in Fife are of special interest to the Scotch archæologist, for this reason, that they exactly resemble, in type and character, the carvings on the so-called Sculptured Stones of Scotland. In his magnificent first volume on the Sculptured Stones of Scotland, Mr Stuart has collected one hundred and fifty examples; and latterly perhaps fifty more have been discovered. These Sculptured Stones extend along the whole east coast of Scotland, from the Forth northwards. Only two have been found south of the Forth. In general ornamentation, they resemble the sculptured stones of the west of Scotland, Ireland, Wales, and England; but the peculiarity of the Scotch stones is, that they have additional figures and symbols upon them that have been seen nowhere else in the world. These peculiar and characteristic symbols consist of the crescent or crescent-ornament, sometimes intersected with the V sceptre; of the so-called spectacle ornament—a double set of circles connected by middle lines—with or without the intersecting Z sceptre; of figures of elephants, fish, serpents, mirrors, combs, arches, or tores, &c. The arrangement of these symbols upon the stones is in no two instances alike. On the oldest stones they are cut upon unhewn blocks, without any surrounding ornamentation. In the Sculptured Stones of a later date, they are cut in a raised form, with surrounding ornamentations, and often combined with figures of the Christian cross. Other figures are found carved on these stones, as portraits of priests and dignitaries, processions of men; the sacrifice of the bull; war and hunting scenes; animals, native and foreign—and particularly of Eastern origin—as the lion, tiger, camel, and monkey; the battling and devouring of men by wild animals; men with monster heads of beasts and birds; representations of dragons and monsters, &c. There is one instance of the representation of a boat on St Orland's Stone at Glamis; and another of a chariot, on a stone at Meikle.

These rude sculpturings have, with one exception, been (previously to

the present time) found only on sepulchral stones or monoliths; but in the Fife caves they exist in great abundance on the cave walls. These walls are usually comparatively smooth; and in many places, though not in all, they retain the figures cut upon them. The cave figures consist of animals, as the elephant,—exactly of the form seen on the Sculptured Stones,—the deer, the dog, the swan, the peacock, fish, serpents, and monsters, a tripod, jar, &c., &c. On them we see also representations of the mirror, comb, and arch or horse-shoe. No perfect example of the crescent ornamentation exists in these cave sculpturings; but many specimens of the spectacle ornament are to be found on their walls both with and without the intersecting Z sceptre.

One of the cave-figures is specially interesting, from the fact that it is the exact counterpart of the only analogous carving found on aught except a monolith, viz., a scale of silver armour presented to the Antiquarian Museum of Scotland by Mrs Durham of Largo, and whose history is this:—A man still living in Fife—a huckster—acting, it is said, upon an old tradition, that a knight lay buried in silver armour in a small barrow called Norrie's Law, stealthily dug into it, found in reality the silver armour, and removed and sold it in pieces to the amount, it is alleged, of four hundred ounces. By the time this spoliation was discovered, the silver armour was all melted, except a few fragments. One of these fragments is a scale, having cut upon it a spectacle ornament traversed by the Z sceptre, and having appended to one end of it the head and shoulders of a dog, as in some modern Orders of European Knighthood. A similar figure, with the appended dog's head, is carved upon the interior of one of the Wemyss caves.

On the walls of some of the Wemyss caves there are crosses of various forms, and particularly of the equal-limbed or Greek type; and, in two or three parts, appearances somewhat resembling letterings, and symbolic arrangements of figures or hieroglyphics. On the walls of St Adrian's cave are lines which have been believed to be half obliterated Runes; and the Rev. Mr Skinner of St Andrews has a loose stone from this spot which presents, he thinks, Runic characters.

Among the cave sculpturings at Wemyss there is a figure of a man of diminutive form; and Mr Stuart has traced among them faded outlines of a human figure, apparently tailed, as if he formed one of the provok-

ingly missing links which some enthusiastic ethnologists are so anxiously and vainly searching after.¹

The caves of Fife, both those that have sculptures and those without them, have almost all occasional complete perforations or holes cut in the course of their angled or projecting ledges, as well as in their floors and roof; and these perforations or "holdfasts" seem fitted for a thong or rope to be passed through them, as if they were intended to suspend or to affix objects.

The age of these cave sculptures can only be fixed by approaching the age of the analogous figures upon the Sculptured Stones. The earliest of the Sculptured Stones are perhaps very old—possibly as far back, if not farther, than the period of the Roman invasion. In opening last year a cairn at Linlethan in Forfarshire, a figure of the elephant, exactly similar to those existing on our sculptured stones, was found on a stone lying upon the covering of the stone-enclosed cist. This cist contained a bronze weapon and an urn. The elephant carving was as old, therefore, as the era of urn burial and bronze weapons—*except* the carved fragment of stone had got by pure accident into its present position when the barrow was opened twenty years ago. The ancients sometimes buried both stone and bronze relics with their dead, after apparently they had iron instruments and weapons. But if the bronze dagger at Linlethan was a weapon used by the person buried under the cairn, the date is probably pre-Roman. For when Agricola invaded Scotland in A.D. 81, our Caledonian forefathers had apparently already passed through the bronze era, as, according to Tacitus, they fought the Roman legions with swords "long and without a point;" in other words, with iron swords. (See *ante*, p. 124).

But most of the Sculptured Stones, particularly the more elaborate varieties of them, were of comparatively later date, and were probably erected as late as the eighth or tenth century. An elaborate specimen found buried in the old churchyard of St Vigean, having upon its surface the spectacle ornament, the crescent, the mirror, the comb, several animals, a hunter attacking a boar with bow and arrow, &c., all in raised

¹ Since these Notices were published I have, in revisiting the Caves, seen this figure, which is above two feet in height; but neither Mr Drummond nor I could make out any appearance of a tail appendage.

figures, has an inscription on it, which is probably the only Pictish inscription and sentence now remaining. It speaks of the stone as erected to Drosten, son of Voret, of the race of Forcus; and a Pictish king Drosten was killed in the battle of Blathmig or Blethmont—a mile or two off—in the year 729, as we learn from the Annals of Tighearnach. The crosses found among the Fife cave sculptures at Wemyss show that they were cut after the introduction of Christianity; and in one or two spots there are appearances of Christian monograms. Within St Adrian's cave at Caplawchy, near Elie, there are many crosses, generally of the eastern form, on the walls; stone seats cut out, &c.; but no animals or symbols.

The meaning of the mysterious symbols on the caves and sculptured stones, and the purposes for which they were cut, are archæological enigmata that no one has yet solved. As long as they were found on sepulchral monoliths only, they were supposed to be hieroglyphic or heraldic *funeral* inscriptions or emblems. This doctrine is so far gain-said by this late discovery of them on the walls of caves. But possibly they may be sacred symbols of some description, or of some unknown form and meaning. For around and upon his gravestones man has always been in the habit of cutting emblems of his religious creed whenever he has cut anything at all.

Other Scotch caves have sculptures cut upon their walls. The so-called Cave of Bruce, in the Island of Arran, has been found by Dr Mitchell and Mr Stuart to have deer and serpents carved on its interior; and many years ago, within St Maloe's Cave, in Holy Island, Dr Daniel Wilson found ancient Scandinavian inscriptions written in Runes.

In many counties in Scotland, both on the sea-shore and inland, there exist large caves, the walls of which require to be now carefully examined, in order to find if our ancient forefathers had carved upon them any such emblems and sculpturings as have been traced in Fife. The Fife caves have formerly been inhabited. From some of the Wemyss caves a collection of bones have been obtained, split to remove their marrow, like the bones found in the old Danish midden heaps, &c. Among the bones were those of the deer, sheep, ox, &c.; shells, also, of limpets, &c.; and microscopic remains of cereals were found in cavities in the rocks that had been apparently used as rubbers or querns. Perforated stones

and two implements from the tyne of the deer's horn were picked up from the rubbish upon the floor; but the debris of these caves requires to be more carefully searched, before all that could be ascertained on this point becomes known to archæologists. In Scotland, there is one cave still occasionally inhabited, at Wick, and within which Dr Mitchell has seen living a family of eight or ten. But cave men are common elsewhere. Mr Barnwell has lately recorded the interesting fact, that in the neighbourhood of Chartres there are at present living, in caves, about 150,000 human beings, in the very centre of France. In Africa, Asia, &c., caves are still inhabited, as they were by the Troglodites and Horites of old.

In England, we know that in archaic times caves were inhabited by the men of those distant ages, such as Kent's Hole, the Brixham Cave, the Kirkdale caves, &c. In these caves the bones of man have been found with his stone weapons; and along with them the bones of long extinct animals, as the mammoth, the cave bear, the hyæna, &c. But in his earliest and rudest times, man has been a sculpturing and painting animal; and his old attempts in this way may possibly yet be found upon the walls of those ossiferous English caves. Sir Charles Nicolson and Sir William Wallace have both stated to me the curious fact, that at the heads of Sydney harbour rude and ancient figures of the kangaroo, &c., have been found sculptured on the rocks, when the turf was removed for building operations there. Mr Graham has likewise informed me that at the Cape, the Bushmen—one of the rudest existing races of humanity—live much in caves, and frequently paint on the walls of them the animals in their neighbourhood, and sometimes battle and hunting scenes,—always in profile. Mons. Lartet has lately shown that the caves of Perigord have been inhabited by archaic man, at a time when apparently he had as yet no metallic weapons, and when the reindeer still inhabited the south of France. Yet amongst the relics found in these Perigord caves have been discovered sculpturings upon stone, bone, and ivory, of different animals; and latterly a rude sketch of the mammoth itself. All this entitles us to hope that, if these cave researches are prosecuted, we may yet find on some *Cave Walls* sculpturings done by man in the most ancient times, and containing fragments of his earliest history.

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ERRATA.

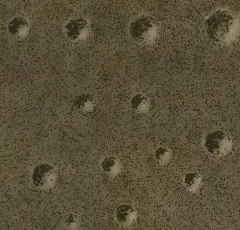
In consequence of one or two plates having been changed during the printing of the Essay, some errors of reference have occurred in the text, which the reader is requested to rectify, viz. :—

| | | | |
|------|-------------|----------------------|-------------------------|
| Page | 5, line 11, | for XXV. | read I. |
| " | 7, " | 8, " XXV. | " I. |
| " | 9, " | 19, " XXII. | " XXIII. |
| " | 23, " | 26, " 2 | " 3 and 2. |
| " | 35, " | 23, " XVII. | " XVIII. |
| " | 36, " | 7, " XVII. | " XVIII. |
| " | 46, " | 3, " XVI. | " XXVI. |
| " | 52, " | 30, <i>add</i> | See Plate XXVI. fig. 3. |
| " | 53, " | 15, <i>add</i> | XXVI. fig. 4. |
| " | 57, " | 13, <i>for</i> XXII. | " XXIII. |
| " | 57, " | 25, " XXXII. | " XXIII. |
| " | 71, " | 16, " XXX. | " XXXI. |

PLATE I.

COMMON TYPES OF CUP AND RING CUTTINGS

TYPE 1.



TYPE 2.



TYPE 3.



TYPE 4.



TYPE 5.



TYPE 6.



TYPE 7.



PLATE II.

CHIEF DEVIATIONS FROM THE GENERAL TYPES.

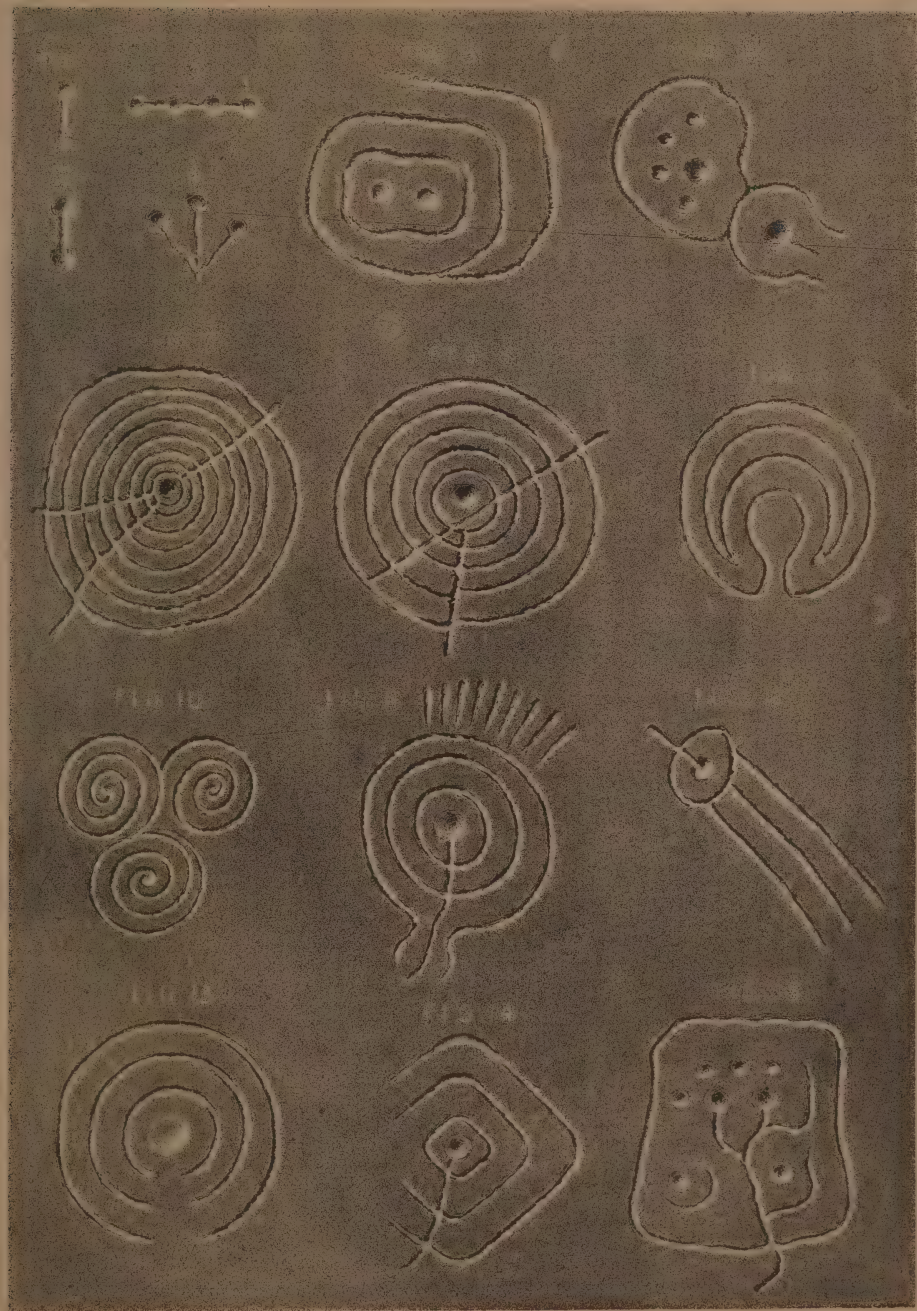


PLATE III.

STONE FROM CIRCLE AT ROTHIE MAY.

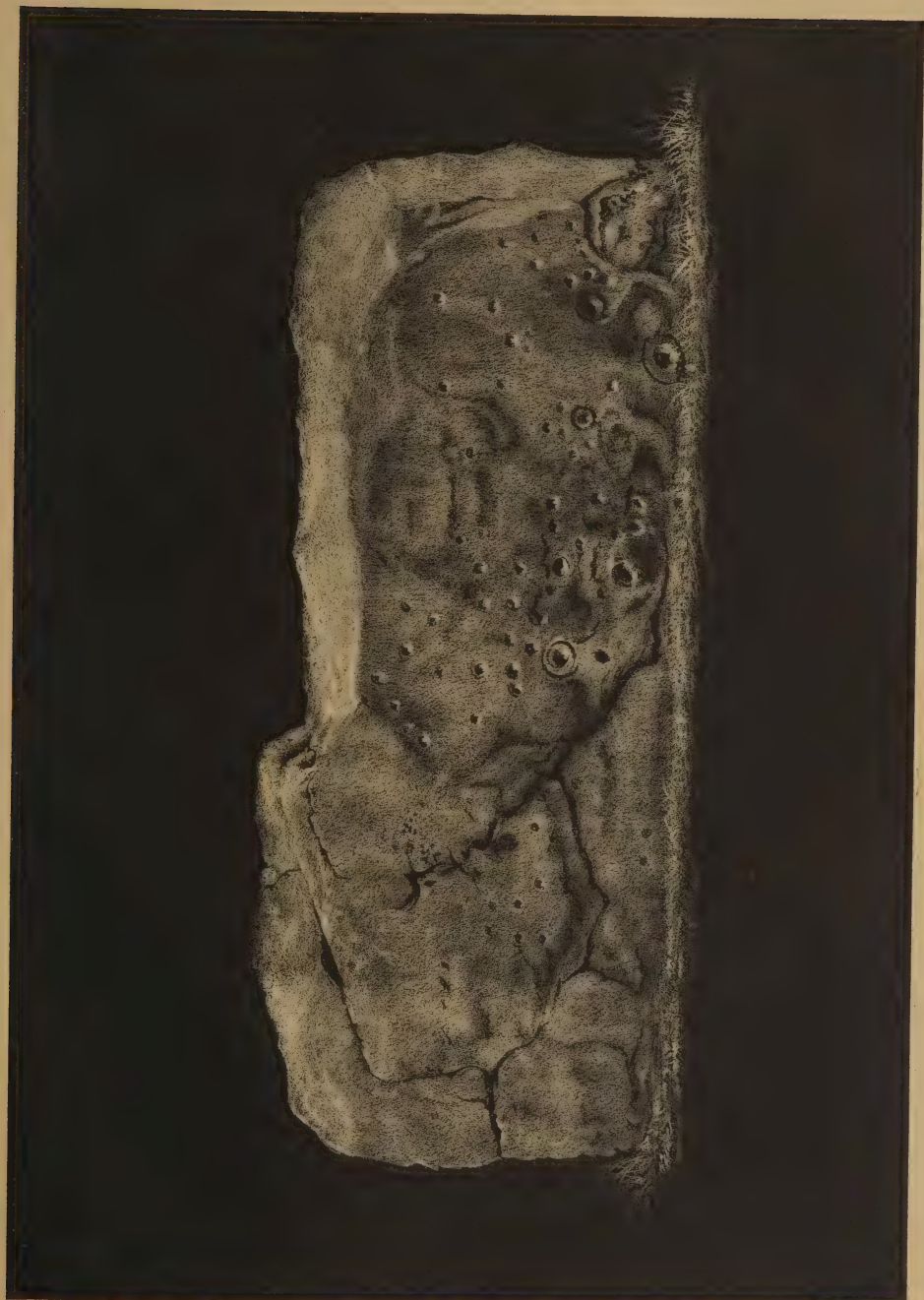


PLATE IV.

STONES AT 1, THORAX. 2, MONCRIEFF. 3, DUNBAR.





FIG. 1



FIG. 2



FIG. 3



FIG. 4



FIG. 5



FIG. 6



PLATE VII.

"LONG MEG," FROM SALKELD CIRCLE.



PLATE VIII.

OAKLAND CIRCLE, ISLE OF MAN, & CROMLECH, &c. IN GUERNSEY.



PLATE IX.

CROMLECHS AT RATHO AND CLYNNOG-FAWR.

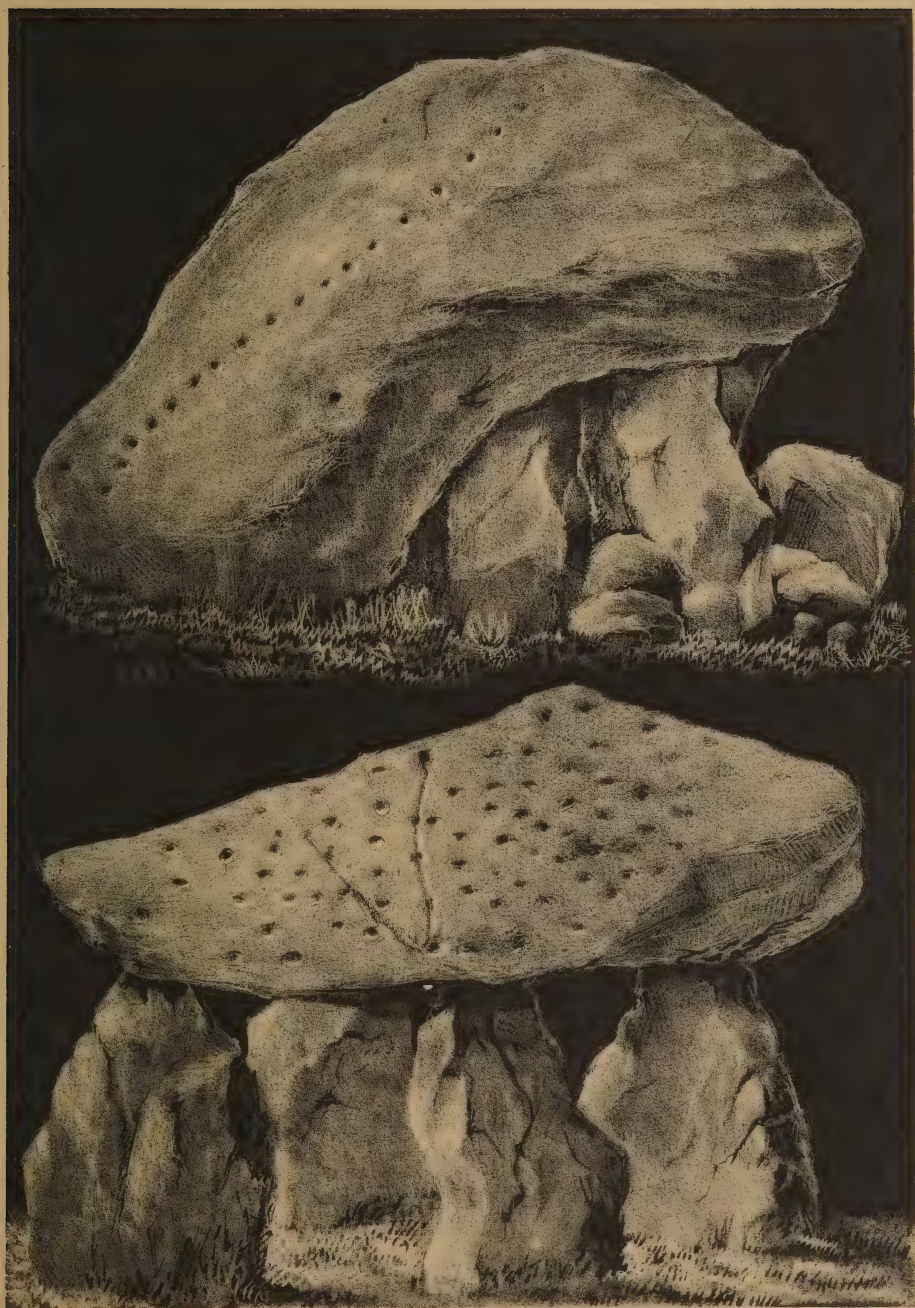
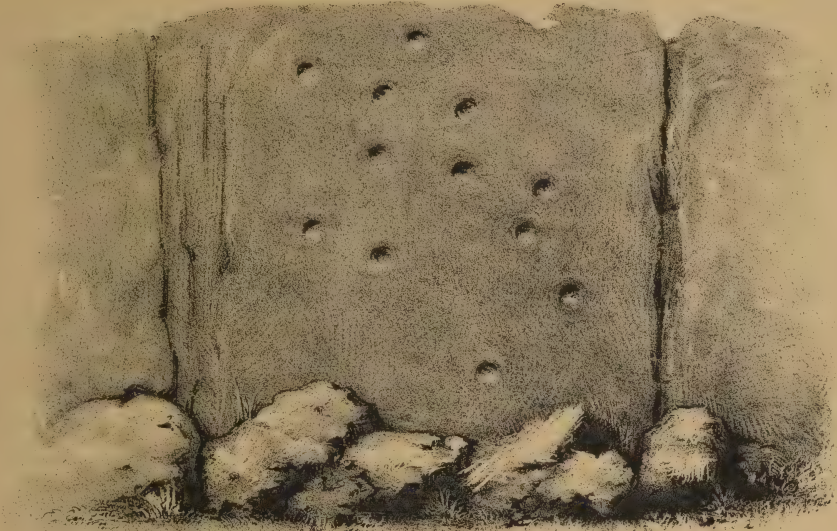


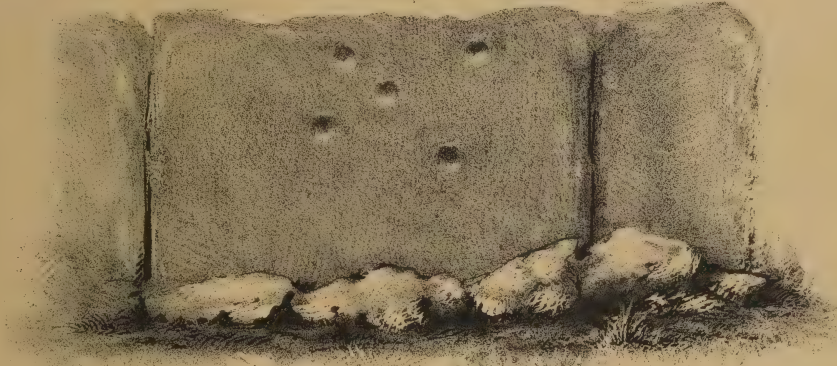
PLATE X.

FROM CHAMBERED TUMULI AT CLAVA.

3



4



1

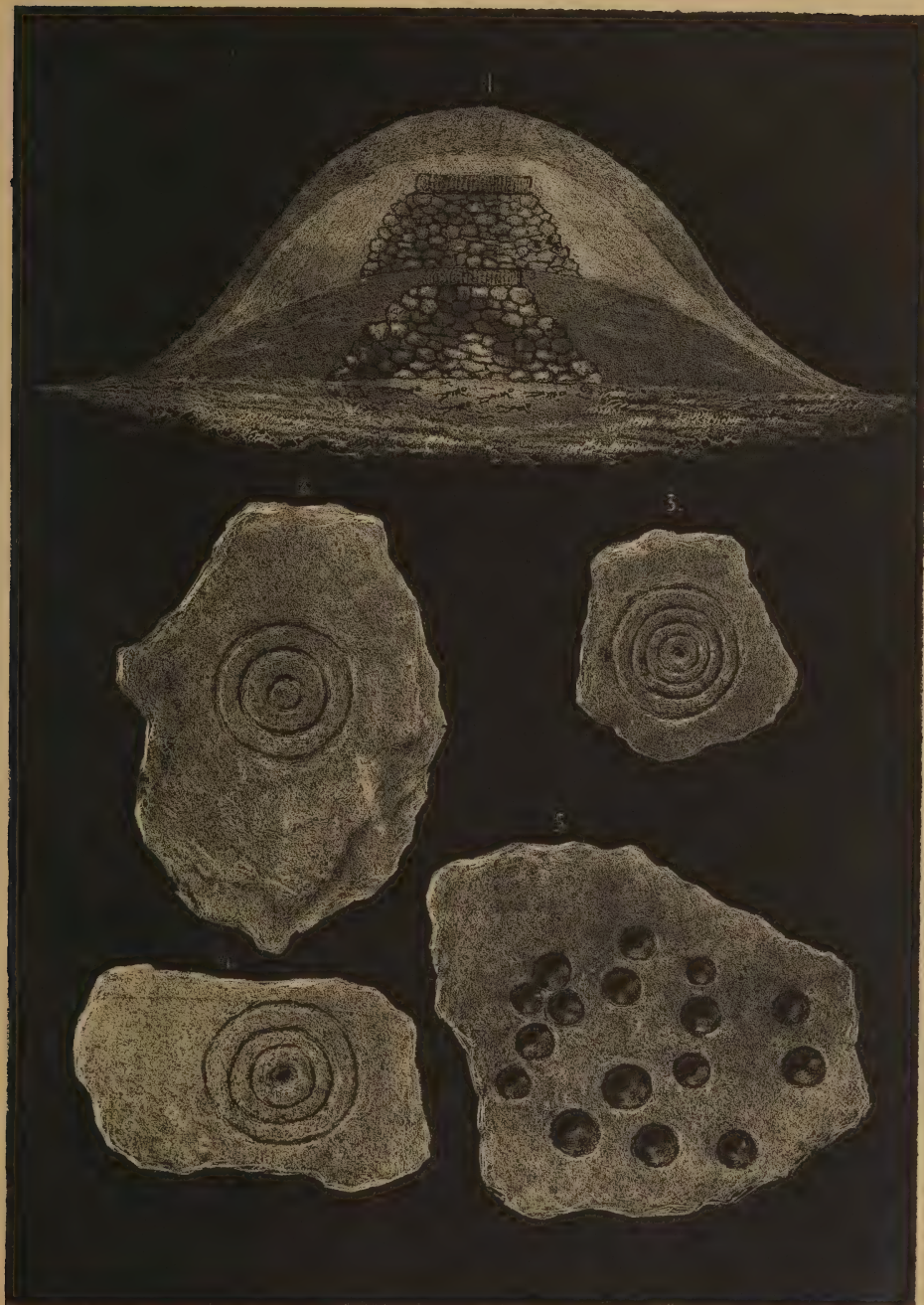


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PLATE XII.

FROM DORSETSHIRE, NORTHUMBERLAND AND FORFARSHIRE.





CISTS AT COILSFIELD, ACHINLARY, CARNBAN, AND WALLTOWN.



PLATE XIV.

STONES FROM ROSSHIRE AND FORFARSHIRE.



PLATE XV.

KIST-VAEN, AT CRAIGIE-HILL, LINLITHGOWSHIRE.



PLATE XVI.

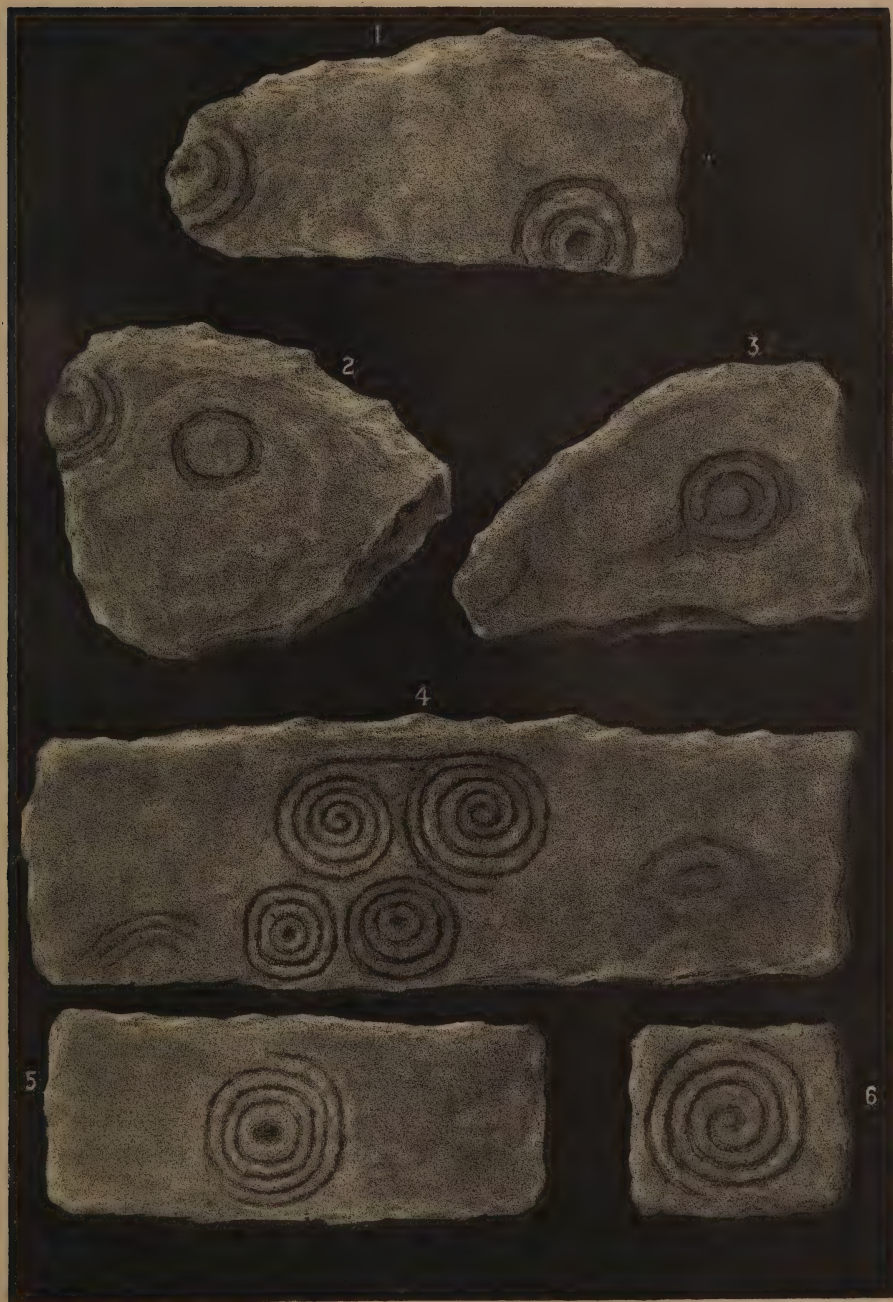
ISOLATED STONES FROM JEDBURGH, &c.,







FROM TORWOOD, STIRLINGSHIRE, AND ORKNEY.



FROM WEEM AT LETHAM GRANGE, FORFARSHIRE.





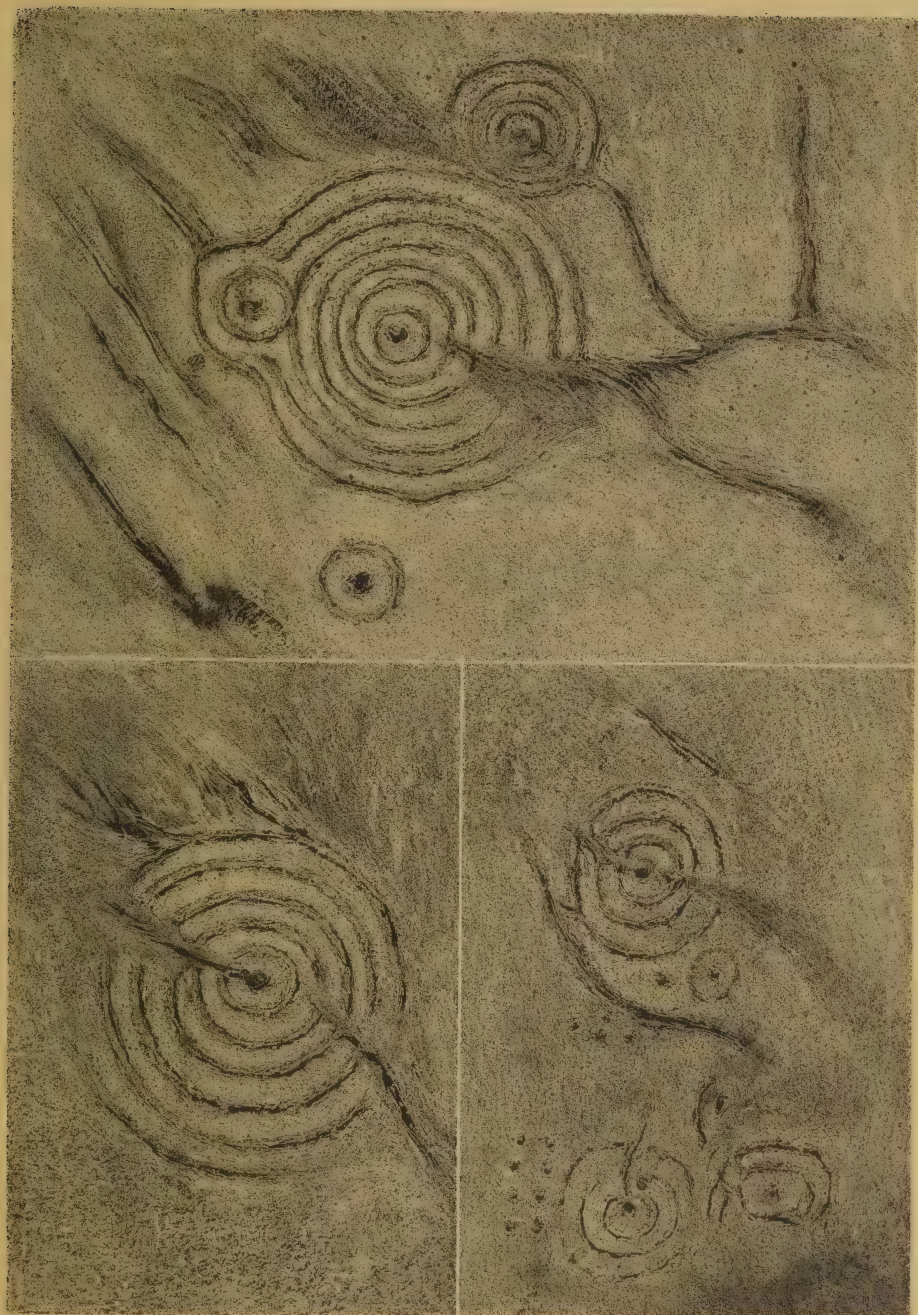
PLATE XXII.
SCULPTURED ROCK AT CARNBAN

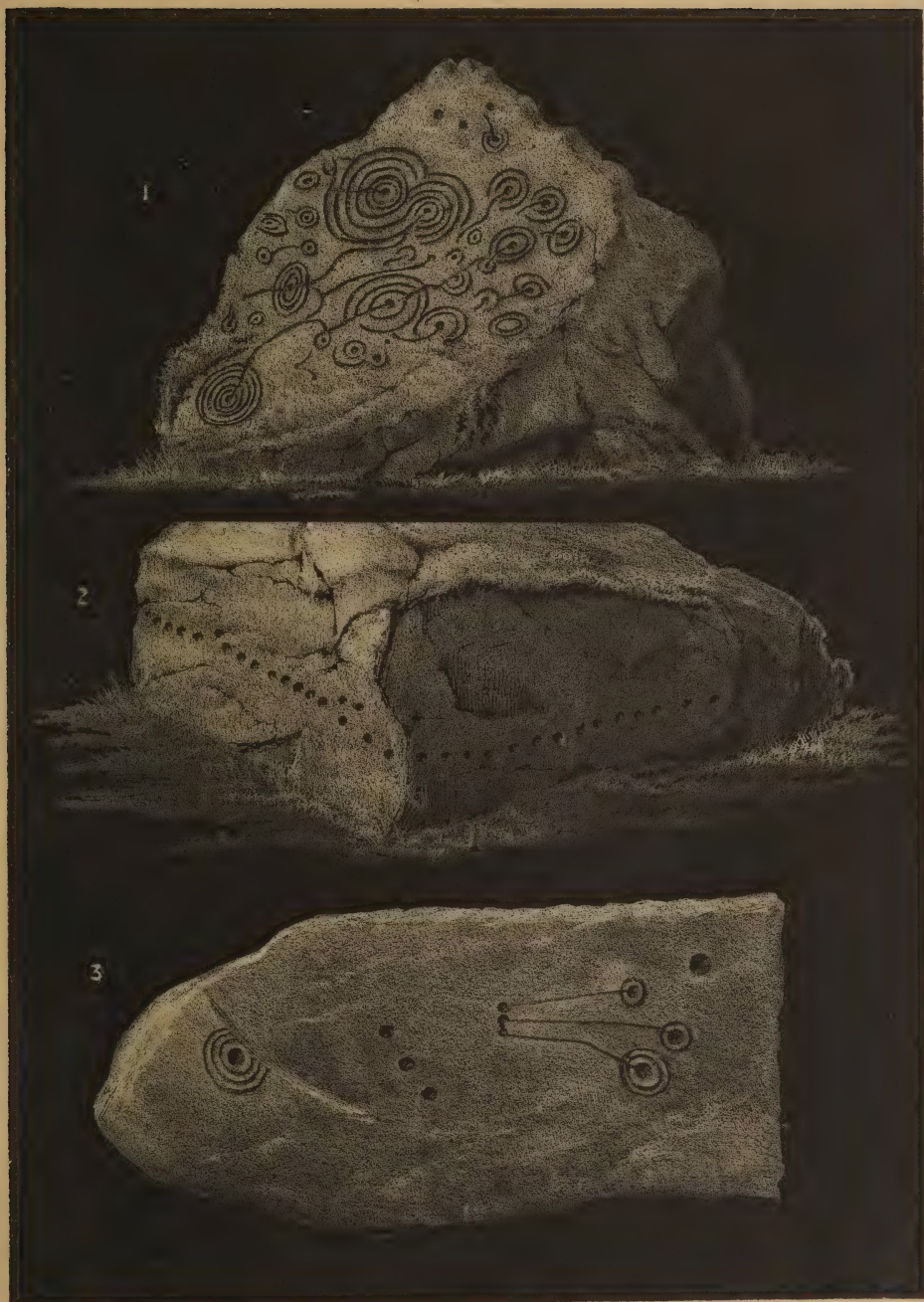




PLATE XXIV.

ROCKS AT CHATTON LAW, NORTHUMBERLAND.





FROM CARLOWRIE, ROBIN HOOD'S BAY, &c.





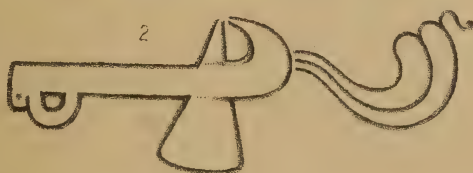
FROM CHAMBERED TUMULI AT SLEIVE-NA-CALLIGHA, IRELAND.



FROM TUMULI OF NEW GRANGE AND DOWTH, IRELAND.



FROM SEPULCHRAL TUMULI AND CROMLECH OF BRITTANY.



FROM SWEDEN AND DENMARK.





